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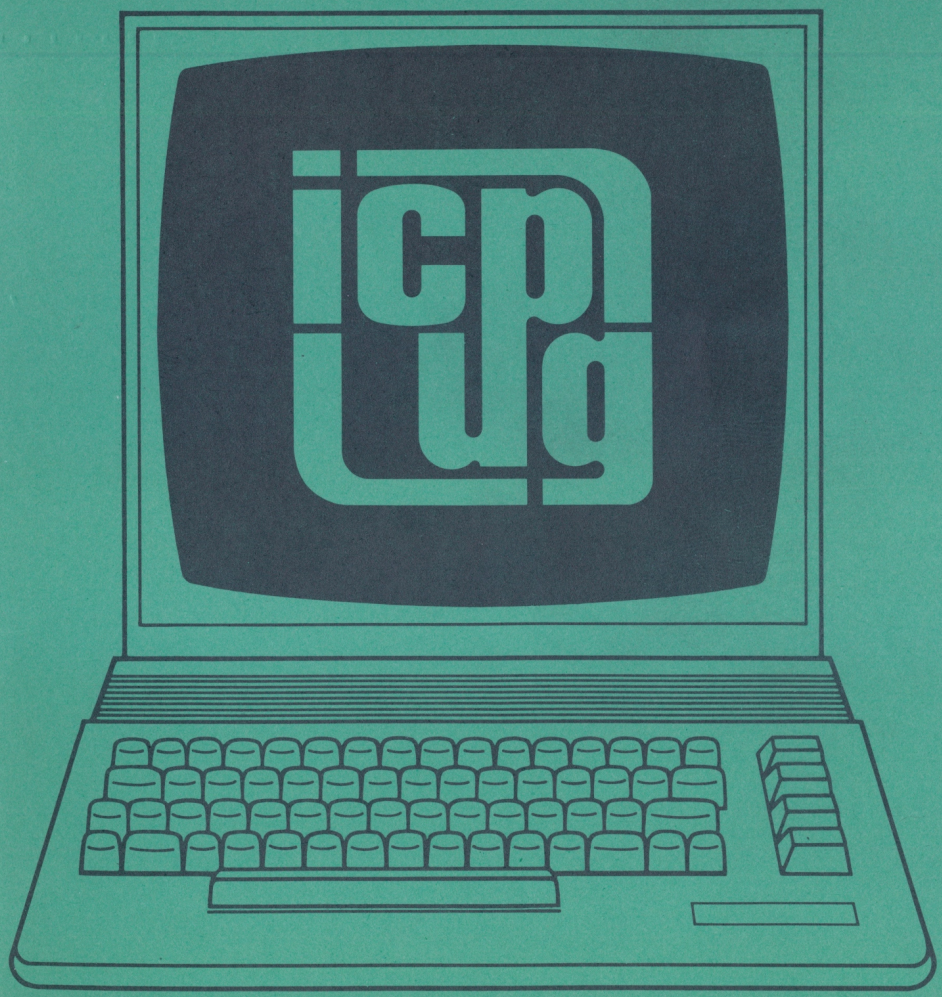

Europe's first independent magazine for CBM users

Volume 11 January/February 1989 Number 1

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SOFTWARE LIBRARIANS - See last two pages and inside back cover

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icpug newsletter

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EDITOR'S NOTEBOOK

1988 was the year that Australia celebrated its bi-centenary, and ICPUG celebrated its first decade. We have a long way to go in order to catch up with the Australians, but it may be interesting to ponder what Commodore users will be doing in 190 years... During our celebratory year, we took the opportunity to remind ourselves of some of the things ICPUG (or IPUG as it was then) was doing in its formative days. It is now 1989, and the wheels of progress grind ever on. Onwards and Upwards goes the cry as we anticipate Commodore's new goodies ... 1.3 ... A2500 ... ECS ... 8096 ... A2090A ... Ok, I can see the glazed look coming over your faces already, so I shall not persue that analogue any further.

Editing an ICPUG Newsletter is a rather daunting task, and I hope that my first offering is to your liking. I have certainly enjoyed producing it (actually, if it wasn't for Janet's marvellous cakes we'd have never survived putting this together!) The Newsletter is edited on a Commodore 128, using Vizawrite Classic, and camera ready copy is printed on more-expensive-than-photocopier paper using a Hewlett Packard Laser Jet. Material arrives in all kinds of formats, from 4040/1571 through 8250 (easy to handle) to Amiga format (not too difficult) to IBM format (bit of effort this one - it required using Superbase's Comms facility to transfer it to the Amiga, then Access 64 could write it to a 1571) and one article even arrived via a unique trans-Atlantic modem link.

Both of the previous editorial regimes have stated the intention of producing the newsletter on an Amiga. This one will be no different. However neither of them was able to succeed. This one will probably be the same. The reason is simple. There is not a wordprocessing or D.T.P. program available for the Amiga which caters for our requirements; specifically to print proportional right-justified text using a font built-in to the printer (in our case the Hewlett Packard U font cartridge). The gauntlet is down, chaps...

Your Editor - who is he?

I suppose I had better tell you a little about myself. I'm 28, single (all reasonable offers accepted!) and living in Oxford. Height 5' 7", dark hair, green eyes, and what might be called a beard by somebody who had never seen one before. Originally spawned in Rochester, Kent, I moved to Portsmouth for the purpose of gaining an education, or a degree in Electronics. Despite several goes, my 10p ran out and I obtained neither. I then worked for a tin-pot Electronics company, involved in CCTV and slow-scan, until they got fed up and gave me the push. Then followed an entire weeks worth of self-

employment, culminating in a contract to do pre-release product testing for Precision Software. After the contract ran out, they kept me on (so I guess they like me). And that's where we are.

Having said all that, maybe it would be a good idea to do a brief profile of a prominent ICPUG member every issue. Write in and let me know what you think.

Please note that my address has changed since the last issue. The new address is given in the inside front cover, and I am finally contactable by telephone again! As a reminder, my new address is: 70 Westway, Botley, OXFORD. Tel (0865) 790687.

Writing for the Newsletter

As a service to our members, ICPUG intends to make much of the Newsletter available electronically. This will take two forms; on disk with a special reader program for our vision-impaired members, and in restricted access areas of commercial online networks (Compunet, CIX, Prestel for example). Our normal copyright notice is being extended to accommodate these.

Writing for the Newsletter is as simple as putting pen to keyboard. We like submissions to be on disk (we will be able to read all Commodore formats and even some others - IBM and Atari ST for example.

It is helpful if you can include a printout of your masterpiece, so that if the unthinkable should happen and your disk becomes corrupt, we can at least salvage something.

Please, when you write, do not use those lovely features provided by your wordprocessor. You know the ones; boldface, underlining, italics, tabs even. The codes used for these things do not translate well across WPs yet alone across machines. Other things to beware of are pound signs (£) and double-quotes ("). Vizawrite in its infinite wisdom will not import double quotes. They get replaced by a space. If you use double quotes, please ring them on the printout so they are brought to our attention. Or better yet, use two single quotes ('). As you can see, the difference is hardly noticeable. Pound signs should also be marked. Many printers use the 'hash' symbol (#). Others have a separate pound key. Vizawrite uses something else - Control-Zero. The C128 does have a pound key , but using that, while the HP will print it, causes the proprotional spacing to screw up! ('£' - Notice how the right hand end of this line does not quite line up properly)

Copyright of all original material remains at all times with the author. By submitting material for publication in the ICPUG Newsletter, you grant ICPUG permission to reproduce your material within the Newsletter and also in

electronic form both on magnetic media and online telecommunications networks. These permissions are assumed unless specifically stated otherwise by you.

The final and probably most important part of writing articles is getting them to the Editor. You already know my address, so send them there, or send them to Iain at his address. Both of us can also be reached by Email on CIX. Iain's ID is IGRAVES, and mine is TARNOT.

Producing the Newsletter in time for you to read it at the beginning of February means adhering to certain deadlines. This issue for instance had to be with the printer on January 22nd. That meant that all the material needed to be edited, collated, laid-out, proofed, re-edited and mastered during the week before. The copy deadline (the last day we accepted material) was the weekend before that.

To aid you in planning your articles, I have included below a list of the five remaining copy deadlines for this year. You will see that they all coincide with the first saturday in odd months.

March 4th
May 6th
July 1st
September 2nd
November 4th

I am sure you can appreciate that if you miss the deadline, we will miss ours, and the Newsletter will slip back into the spiral of lateness that afflicted us a few years ago. So please, help us to maintain a high standard by not trying to sneak that last minute article in the day after.

Non mea culpa!

In the last issue, Tim's bit faded into a review of the PC1. This rather left the impression that I had written it. This was not in fact true, and our apologies go to Mr Mark C. Saltmarsh, who was the true author. Oh that he had been snowed under with all the fan mail instead of I! (For the curious among you, I am the proud owner of one of Mr Sugar's Amstard PC machines.)

Now, sit back, relax and enjoy...

TWA

CHAIRMANS CHATTER

by John Bickerstaff

Happy new year

Your committee would like to wish you all a happy and successful 1989. We will continue to give you the support and facilities provided in the past and add to these if at all possible.

Commodore continue to progress profitably and at least one million Amiga's have already been sold. Even more encouraging is the fact that 1988 was the best ever year for the 64 with some TWO MILLION sales worldwide. It seems that the software writers are now producing programs that equal or better those written for the Amiga. Long live the 64.

A new year - a new editing team

This is the first issue of the newsletter to be produced by our new editing team. We hope that you like it. The Readers Write section is just that so please send your letters in to Brian Fowler expressing your views on your favourite subject. Your opinions are especially welcome since they help us to understand more fully the feelings and ideas of the membership.

A long strike

One of our disk copiers, who has been a member of ICPUG for many years, has been 'struck' by the lack of disks coming his way - even after the Post Office sorters returned to work to deliver his Christmas Mail. This lucky (?) copier is David Annal who looks after the A to D section of the ICPUG disks for the Amiga (for those of you who have joined in recent years David re-organised the original 64 library for us providing the sound foundation on which the present library has grown). It seems that even now the post boxes in the area where David lives are sealed up and much of the mail that was unsorted at the time of the original strike remains so. Therefore please be patient if you have still not received your requested selection of ICPUG Amiga disks. However, if you are still concerned about your disks send me a letter (with S.S.A.E.) and I will speak to David and send you a reply.

Mail from you

I am sure you realise any enquiry you send to us should be accompanied by two things. The FIRST is a stamped self addressed envelope (overseas members should send International Reply Coupons). The SECOND is your current ICPUG membership number. This is a six figure number and differs from the four figure number on your share certificate.

COMMODORE CHRISTMAS SHOW 1988

RAFFLE PRIZE WINNERS

		Donated by		
Stack RS232 Interface	C64	Commodore	A. Brown	512214
Music Maker	C128	"	K. Morton	515432
Music Maker	C128	"	A. Oram	631794
Superfile	+4	"	W.D. Brighton	633072
Programming the 64	C64	"	A.T. York	613979
Comal Handbook	C64	"	B. Fowler	613666
Company P.A.C.	+4	"	M.K. Pathak	517705
EASY Wordprocessor	PC	"	R. Harris	514750
Zork I	+4	"	M. Pickering	633066
4 Cassette Games	+4	"	J. Egan	614945
Super Expander Cart.	VIC20	"	P. Nicol	531793
Super Expander Cart.	VIC20	"	R. Webber	517855
Info Mats	Amiga	Tim Arnot	B. Grainger	510158
CP/M User's Guide	C128	Bytes & Pieces	A.J. Cosham	517242
Intro to Basic	C64	ICPUG	K.J. Williams	531796
Sonix	Amiga	Megaland	S. Boyce	517817
DiskMaster	Amiga	Precision	W. Radcliffe	531787
Pixmate	Amiga	Precision	M. Lewis	53l782

LIBRARY LORE

by D.P. (Joe) Griffin

Perhaps the main reason that most people join ICPUG is to get access to the software libraries. Currently there are a lot of outlets providing PD software for the Amiga. Under the rules of the game, they are not meant to sell the material, but can charge a copying fee. Typically at the present time in the UK you would pay about £2.50 - £3.00 per disk, which includes the media.

By contrast, ICPUG does not charge a copying fee but you have to provide both your own media and return postage. With 3.5" disks at about 90p each, you can get 5 PD disks for about £5.00, including your postage costs. Thus when you get your second set of 5 disks back from the copier, you have covered the membership cost, so the newsletter comes free.

For the other machines, of course we hold substantial PD libraries, which virtually no-one else does. (Anyone know a source of PD PET material?)

If you have not yet made use of the library service, why not send off a disk to get the catalogue for your machine. A full list of the copiers appears at the back of every newsletter. Amiga owners should note that there are three separate libraries for their machines, so they will need to send three disks out to three separate people.

Please remember, in any correspondence with ICPUG copiers or other officials, PLEASE enclose an SAE for the reply.

Who Run the Libraries

The Libraries are operated (as are virtually all aspects of ICPUG) on an entirely voluntary basis. The Library Organisers and Copiers all operate in their own time, unpaid and in most cases using only their own equipment.

Our Library Organisers coordinate the libraries for the various machines. We receive, examine and (if suitable) incorporate any new material into the library. For the more popular machines a group of Copiers provide disk or tape copies on request from the members, while for the older, or more specialist machines, the organiser also acts as copier.

Contents

The Libraries contain PUBLIC DOMAIN, FREEWARE & SHAREWARE programs from a wide range of sources, including our own members and other user

groups. ICPUG DOES NOT SUPPORT SOFTWARE PIRACY and so, they do NOT contain 'un-protected' copies of commercial programs or other copyright material. Nevertheless, there are a great number of very good programs available from a wide range of sources.

What Members May Obtain

In line with our Public Domain policy, members MAY obtain all the material in the library by successive requests. HOWEVER, in particular with the Non-ICPUG Amiga disks, there is far more material available than any one member can use. Pete Miles tells me that many of the later Fish disks contain copies of material from earlier disks, with bugs fixed or merely created by using a different compiler. Does it really matter whether the program you are using was compiled using Lattice C, or Fred Bloggs C? The recommendation is to look at the higher numbered disks first. Please consider whether you really want the material on the disk or are merely collecting software. With my full consent copiers who receive repeated requests and suspect collecting may push such requests to the back of the queue.

In order to retain a measure of control over the work-load imposed on the Copiers, we do restrict the amount of material which may be obtained from any one request.

Disk Users may obtain up to two disk copies at a time (Amiga up to 5).
Tape Users may obtain up to four programs, from any one disk.

These are general guidelines, if you have any queries, contact the particular Library Organiser (enclosing an SAE for the reply) to obtain specific details of what he/she offers.

What it costs

Unlike many of the American User Groups, ICPUG DOES NOT CHARGE A COPYING FEE.

However, we do require that you supply the material onto which the copy will be made and also that you supply packaging and postage for the return.

PLEASE, do not sent the cost of postage to us, SEND STAMPS. We all give up our spare time to provide your copies, which means WE have less time to do our own computing. In particular, we are not post offices and do not carry a stock of stamps. If you send us money for the return postage, there is bound to be a delay until it is convenient for us to get to a Post Office. Also,

please do not send us material by Registered Post or Recorded Delivery - most of us are at work during the day and cannot accept such items. This means that we have to make a special journey to pick up your disks which again detracts from our free time.

Naturally, we make an exception for Overseas members, who should send International Reply Coupons or a cheque/money order (in Sterling, drawn on a UK bank) to cover the amount of material sent. Please note that non-Sterling cheques etc cost more to cash than the postage and IRC's are not worth what they cost you! For example in Eire an IRC costs 72p; to us it is only worth 23p. As a general guide, for SURFACE mail, send a minimum of one and a half IRC's per disk. For AIR mail, outside Europe, this should be doubled.

Where to obtain the Libraries

A full list of the Copiers is given inside the back over of the newsletter and is updated every issue, as required, but some amplification of the system may be of use to newer members. In particular, if we know what machine you have, we can supply you with the latest information on your library.

For ALL the libraries we have established Catalogue Disks, which contain at least a copy of the directory of each disk. Most of the catalogue disks contain text files describing the operation of the programs on the disk.

PLEASE NOTE: Printed copies of the catalogues are not available.

'PET' Library - Organiser: Joe Griffin

At present over 40 disks are available in the PET Library.

In 4040 format, two catalogue disks are available, containing the lists for the CBM Workshop disks and the ICPUG disks, respectively. On 8050's, these are all on one disk. For tape users, the catalogue disks can be dumped onto two C-60 tapes.

VIC Library - Organiser: Joe Griffin

Four disks of mixed material are available (4040 format)

C-64 Library - Organiser: David Miller

32 disks (plus a catalogue disk) currently available. A number of disk/tape copiers dispense the material from this growing library.

There are three new disks this month:
Games 5, a collection of Mental Agility games (some transferred from board games) and a seven-card patience.
Utility Disk 9 contains the ICPUG Assembler, donated by Paul Bell, together with many programs for disk manipulation. Included on the disk is a utility to allow Freeze-Frame files to load from a 1570 drive.
Utilities 10 contains a whole host of material, including printer and disk utilities.

```
      icpug games #5      ig 2a
30    autoboot            prg
11    autodoc             seq
6     printbootdata       prg
29    acquire instrux     prg
88    acquire             prg
35    black box           prg
24    black box ins       prg
56    can't stop          prg
122   crude 2             prg
1     crude               prg
44    crude instrux       prg
21    1-game              prg
18    property instrux    prg
73    property            prg
38    sevens              prg
51    wordsearch          prg
4     boot.data           seq
13 blocks free.
```

```
      icpug utilities     u9 2a
30    autoboot            prg
11    autodoc             seq
6     printbootdata       prg
0     ----------------    seq
1     boot ass v.1.13     prg
33    icpug assembler.    prg
44    icass user guide    prg
0     ----------------    seq
3     command change      prg
2     command change.1    prg
0     ----------------    seq
```

```
      icpug utilities#    10 2a
30    autoboot            prg
11    autodoc             seq
6     printbootdata       prg
0     ****************    seq
8     barchart            prg
3     barchart.doc        seq
1     day of week         prg
0     ****************    seq
4     errorline lister    prg
4     function keys       prg
17    keybd.ovly.c-64     prg
```



```
42    directory.c         prg
30    printdir.c          prg
0     ----------------    seq
5     disk endless dir    prg
8     disk marker         prg
3     disk new file       prg
5     disk remove dir     prg
4     disk zero blocks    prg
0     ----------------    seq
10    fix freeze frame    prg
0     ----------------    seq
6     librarian.boot      prg
5     librarian.com       prg
11    librarian.copy      prg
1     librarian.dir       prg
42    librarian.main      prg
9     librarian.menu      prg
37    librarian.title     prg
17    librarian.eys       prg
53    librarian.search    prg
0     ----------------    seq
70    sort-directory      prg
99    sort-dir.bas        prg
5     sort-dir.com        prg
1     sort-dir.dir        prg
0     ----------------    prg
6     boot.data           seq
30 blocks free.
```

```
18    keybd.ovly.c-128    prg
5     mini menu           prg
6     menu.doc            seq
9     ps conv 1.9         prg
8     print.64.util       prg
6     petscii-ascii       prg
5     sm/doodle           prg
74    uwedge 5.6t         prg
0     ****************    seq
80    caventerm           prg
10    cavern.1            prg
1     cavern.2            prg
0     ****************    seq
15    bootmaker           prg
14    block modifier.c    prg
28    copy some.c         prg
1     copy some ml.d      prg
2     copy file.c         prg
13    copy files.c        prg
10    copy-all v2.c       prg
5     disk change dos     prg
23    disk dir utility    prg
11    disk editor         prg
6     disk examine        prg
11    diskette mod.c      prg
11    fast backup.c       prg
19    file copy.c         prg
15    multicopy.c         prg
13    sin disk copy.c     prg
14    sd copy/all.c       prg
19    70sec.bckup         prg
0     ****************    seq
7     boot.data           seq
85 blocks free.
```

Plus/4 (and C-16) Libraries - Organiser: Richard Hunt

1989 is the year in which the Plus/4 library will be re-organised. (Provided New Year resolutions survive into February, of course.) Since starting it a couple of years ago, it has grown from an initial 3 disks to approximately 14. (The word

Groups (SIG's) within ICPUG, each of which has its own program library.

COMAL - Organiser: Brian Grainger

Support for ALL versions of COMAL from Basic 2 to 128. Much material available especially for Versions 0.14(disk) and 2.01(cartridge) for the 64.

1520 Plotter Group - Organiser: W G C Austin

Specialist group within ICPUG, providing excellent, valuable support for the plotter.

Obtaining Copies of Library Material

To obtain copies of catalogue or library disks, please send :

A statement of what you want
Disks (max of 2- except Amiga) STATING format required or Tape
Re-usable packaging suitable for return (see below)
Pre-addressed label for return
Return postage (see above)
Please include your membership number.

Packaging of Disks for Library Copies

Packaging of disks causes a great deal of time wasting for copiers. The current 'record' is 30 staples on one jiffy bag - 3 would have been adequate. Worse perhaps is when the staples are covered by sellotape; this makes them almost impossible to remove.

Our recommendations are:

3.5" disks - a jiffy bag stamped and addressed for the return; placed inside an ordinary envelope (which can easily be opened).

5.25" disks - a disk mailer stamped and addressed for the return; placed inside an ordinary envelope (which can easily be opened). (If a mailer is not available, use two pieces of stiff card taped together and enclose a separate envelope for the return.)

Please label the disks with what is required. It saves trying to keep a stack of letters/notes in step with a pile of disks. If you label your disk, it is a lot easier for the copier to keep track.

5.25" disk users should note that we will not supply flippies. My recommendation to all copiers is that they only copy onto the first side of the disk.

Most copiers require formatted disks, some like the Amiga and PET don't. If in doubt, send formatted disks for your copies.

Finally, please remember that technical help is available through Bavin Clarke, our Technical Co-ordinator. Please do not burden your copier with requests for advice.

IS IT A RIP-OFF ?

by Gary Haslam, Tech Troop, One Squadron, 7th Signal Regiment, B.F.P.O. 15

There's a lot of money to be made these days distributing and selling Amiga items by Mail Order. The prices shown below are all from December's monthly magazines. The magazines are, with the exception of the one I used for the German prices, all easily available in the U.K. So it shouldn't be too hard for you to make comparisons of your own. What I'm going to do is show a little table comparing the prices for Software and Hardware in the U.S.A. / West Germany (F.R.G.) and the U.K.

	U.K.	U.S.A.	F.R.G.
FACC II	£ 25	$ 25	DM 50
AREXX	£ 32	$ 33	DM 98
WSHELL	£ 32	$ 33	DM 98
LATTICE C Version 4.0	£ 125	$ 140	DM 350
DISKMASTER	£ 32	$ 38	DM 95
SUPRA 20MB Hard Drive	£ 580	$ 580	DM 1400
1084 Stereo Monitor	£ 250	$ 300	DM 580
STAR LC-10 Colour Printer	£ 250	$ 230	DM 650
External 3.5'' Disk Drive	£ 100	$ 170	DM 270

As is quickly apparent virtually everything is cheaper in the 'good ol' U.S. of A.' This then brings my next point, WHY? I am sure that all the importers of Soft and Hardware to these countries are going to start screaming about Import Tax, Postal Charges, Phone calls etc. However, I would be surprised if these

people :-

a) Are paying the same prices that we are.
b) Have exorbitant postal charges.
c) Don't FAX their orders.

Having looked at Soft and Hardware all that's really left to mention are Books and Disks. Named brand DS/DD disks cost similarly different prices in the three countries. In the U.S.A. they cost about $20. In F.R.G. the most popular named brand (certainly amongst all the people I know) are the Commodore R.P.S. disks. Over here these cost DM 30 for 10. The very same disks in the U.K. will set you back about £18. Now by my reckoning transport costs to U.K. from France (where the disks are made) cannot be that much more than to F.R.G., so who's making all the EXTRA PROFIT? I don't believe that the tax man puts that much on the price.

Some very popular books at the moment very popular are those published by ABACUS. Surprisingly, they are not written by Americans but by a German publishing company called DATA BECKER. These are then translated from the German to English under the ABACUS label. They are then sold in the U.S.A. and U.K.. If you look at the table below, again showing price comparisons, you'll see that the price on books isn't that bad. Considering that they first of all have to be translated, which I would expect to be relatively expensive, they work out reasonably.

Amiga Disk Drives Inside & Out	£ 22.95	$ 29.95	DM 59 *
Amiga Basic Inside & Out	£ 16.95	$ 24.95	DM 59 *
Amiga Tips & Tricks	£ 19.95	$ 14.95	DM 49
Amiga Machine Language	£ 14.99	$ 19.95	DM 49 *

Nothing too exciting so far. However, all the books marked with an asterisk have a disk available, containing all the programs from the book. In the U.K. this disk will cost you £9.95 ; in the U.S.A. $14.95. In Germany this disk is FREE!! and comes WITH the book. Today's (11/01/89) exchange rate was DM 3.23 and $1.73 to the £1.00. It certainly makes you wonder .....

AMIGA
HARD DRIVES
Incredible Value
20MB £399.95*
40MB £599.95
60MB £699.95
* This is NOT a printing error!

DIGIPRO

LISTING PAPER
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DUST COVERS
MONITOR/TV LEADS
GENLOCKS
PRINTERS
MODEMS
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PD CATALOGUES - £2.00

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Cables £7.99

3.5" External Drives

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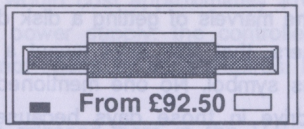

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Access

TEXAS TALES

by Betty Clay

Editor's note: Betty Clay is a retired school teacher, living with her husband, Richard, in Arlington (near Dallas), Texas. Betty is ICPUG's major source of Amiga public domain material, and we were privileged to have her as our guest at last June's Commodore show.

How our priorities do change with time! In a recent cleanup campaign at our house, it seemed time to discard some old magazines. I could not toss them without one last look. My earliest computer magazines had many articles about tape drives, and about the marvels of getting a disk drive.

For Commodore owners, that disk drive meant a dual drive. For others, a single drive was a status symbol. No one mentioned the serious problems of working with a single drive in those days because any drive at all was a marvellous thing to have. People were eager to expand their machines from 8K to 16K of memory, too.

Programming was pretty much expected to be in either the supplied BASIC or in machine language. Other languages existed, but did not figure much in the home computer market. If we could master either BASIC or assembler, swing the purchase of a drive of any sort, and dig our way through absolutely terrible manuals, we could all be experts! Times have changed. All computers now come with at least one drive built in. When was the last time you used a tape?

There were years when I had to load software into twenty school computers from ten tape drives, and it required getting to school an hour before classes began and praying that the students would not turn off the loaded machines before class started. I do not yearn for those days. I do wonder, however, about some of the modern necessities.

We now consider a system to be crippled without two drives. My own machine has a third, the A1020 5 1/4 inch drive, on which I keep all of the libraries, handlers, devices, etc., for which programs kept insisting that I insert the Workbench. A computer with its operating system on disk is certainly easier to use if that disk can be constantly available. I have a 2M expansion memory on the side, also. Just think of that! For years I worked happily with 32K. Now, I must have 2.5M and even that runs low on many occasions.

Current discussions on the networks indicate that the next necessity will be a hard disk. Only a year or so ago, that was a luxury beyond mention for a home user. People now tell me that the Amiga is a crippled machine unless it has at least a 40M hard disk and at least 2M of memory. We all know that

many Amiga users are unlikely to have these luxuries, but our developers are now writing their software with the assumption that we do have them. They use them, and very soon they cannot imagine anyone doing without them. Many mention having hard drives with 100M or more, and having memory cards with the full 8M filled up. How very quickly they come to think this is the normal configuration for Amiga users!

They are telling me now that I must do without all sorts of other things in order to configure my machine the same way. I'm concerned. Will Amiga software become so demanding that we cannot afford the add ons it requires? One developer told me that hard drives could be added to my Amiga very cheaply. In certain cases, this is true. However, every hard drive I have seen advertised for the A1000 would cost approximately $1000 by the time I bought the drive, the case and power supply, the controller, and all the other little necessary items. This is not cheap by my standards. How about yours?

The A2500 was recently released here in the U.S., and I'm sure it is also available in Europe. [I'm not! - Ed] It comes with a 40M hard disk and controller, and the system software is already installed. There is a new A2000HD, sold with the same hard disk setup. These add approximately $900 to the cost of the machine.

There is a rumour that all future machines in the A2000 or higher lines will be sold only with hard disks installed. Today's luxury will indeed be tomorrow's necessity, and the cost of computing will be greater. The matter of cost, however, is relative. My first computer was an 8032, with an 8050 drive, an Epson printer, and one piece of software; a word processor. It cost approximately $4000 in 1981. That would be equivalent to approximately $12000 today. Think what you could put on an Amiga for that!

In the news

The Amiga is getting much better press in our country than formerly. The programmer who does the video shows on the huge board for the Super Bowl is an Amigan, and he uses Amigas for those displays. He is planning a very impressive show for this year's Super Bowl, and the Amiga will get credits there before what will indeed be an impressive audience.

The 20/20 television show is an American news magazine that I would not expect your people to have imported. I observed, however, that your news people are probably trained by the same teachers who train ours. They had the same appearance, the same accusatory manner of speaking designed to give editorial content to what was supposed to be strictly factual, and I could

almost forget that I was in another country when I listened to the news.

The 20/20 show is hosted by a master news commentator, and presents five or ten minute segments on chosen topics. During January, one showing of 20/20 will focus on some medical research that is being done using an Amiga along with the Impulse VD1 digitiser. We look forward to seeing that presentation.

A Colorado firm has found a better way to inspect commercial aircraft for cracks using an Amiga with that same digitiser, and it was featured on the news recently. The VD1 uses 24 bit colour, allowing tremendous amounts of data to be collected.

The magazines that usually ignore the Amiga completely have also begun to give it some space. BYTE continues to bypass the Amiga except for Jerry Pournelle's column. For months, Jerry could not find a kind word to say about our machines. Very recently, he has changed dramatically and says very good things about it. We aren't sure whether the change of heart was due to the help he received from some of the Commodore technical staff, or whether it came when his son's employer began writing software for the Amiga.

SX500?

Khalid Aldoseri is an active member of CompuServe's Amiga Forum, calling us daily from Bahrain in the Persian Gulf. He writes extremely useful little utilities, which he shares with all of us. He also engages in fascinating projects that are fun to follow. Khalid is currently constructing a transportable Amiga, and the idea is most intriguing. He has removed the 64 from an SX case, and installed an Amiga500 motherboard instead. He found a JVC monitor that is Amiga compatible, and has installed a 40M hard disk in the disk bay. There is still work to do. There is no controller card for the disk yet, and he's looking for a good place to install a floppy, but the project is well under way and might well be finished by the time you read this. Many people have been pleading for a portable Amiga almost from the beginning. Commodore has not announced plans to build one. Although one of their engineers has made himself a laptop, it is not designed to be a commercial product. Khalid is the first, to my knowledge, to get this far towards making a portable. The laptop would be nicer, but I have a 64SX and how I would love a portable Amiga!.

Postscript for *your* printer?

Only this week, a very exciting new program has been announced for the Amiga. The program is called PRINTSCRIPT. It will use the Postscript

programming language to turn our Amigas into Postscript printers. PrintScript will make the very best of whatever printer you have. Your computer's memory is used, though it can access a printer's memory if you have that available.

The output is said to be analytic. The analytic refers to the fonts, which are defined in PostScript (i.e., as paths or geometric definitions rather than bitmaps).

There are ads for PageScript in Amiga World and Info magazines this month. The publishers tell us that they haven't done any side by side comparisons of performance between PrintScript and a PostScript printer. As for speed, their full page Amiga World ad took about 15 minutes to print; the ad in the March Info which is more elaborate and includes an image took about 25 - 30 minutes.

The Laserjet requires a long time for transmission; about 15 minutes per page. An all text page will print in close to that time, and the time increases as the page gets more elaborate.

PageScript supports Professional Page desk top publishing package, and will work with any program that understands how to use the PostScript language. It can also be used interactively for programs not designed for Postscript. PrintScript will be published by Pixelations, will cost $89 by direct mail order (initially the only way it will be sold), and will be released in early February.

This product is one that I have wanted for quite a long while. A similar product was written for the IBM computers about a year ago, and has received high praise. Good printouts have been very difficult for Amiga owners without Postscript printers, a luxury far beyond most of our budgets. Now we can come close to matching that output, and for a very reasonable sum.

ICPUG MEMBERS WITH IMPAIRED VISION

We are engaged on a project to assist our vision-impaired members get more from the Newsletter. One idea is to have selected Newsletter articles available on disk, together with an easy-to-use file reader. On the Amiga, we could use a larger font size, and possibly use the narrator device to speak the articles.

The 64 and 128 could also use a larger font. As for the other machines, well, I'm open to suggestions.

What I would like is for any members with ideas on the subject to write to me; offers of help with the programming, preparation and distribution of disks would be particularly welcome.

Brian Fowler - address on inside front cover

SUPER * CORNER

Edited by John Barrs

Superbase Corner is now controlled (if that is the word) by John Barrs but it is written by you. Any questions and contributions should, as of now, be sent to me at Precision Software. Questions I will try to answer, contributions will be received with much relief. Firstly, a brief overview as to where we are in terms of the products:

Superbase for 64/128:

Version 3.01 is available for both these machines at a list price of £24.95 for the 64 and £29.95 for the 128 Any-one who has an earlier version of Superbase may upgrade by requesting a back-up disk for £17.25. The product as sold is on 5.25" disks and if you require it on the 3.5" disk then you buy a back-up. Consequently, it is important to specify which disk you require when you send in for a back-up disk.

All four species of the product (64/128 - 5.25"/3.5") support the 1581 drive, but remember that Superbase must be booted from drive-unit 8:0 and also support any two disk units. In addition the Utility program on the 128 now works in 80-column mode.

Superbase for Amiga:

'Personal' now exists in two forms, the original and an enhanced product which includes text-editing facilities for short memos and other goodies. This is called 'Personal 2'. 'Professional' also has two incarnations, the latest is known as 'Superbase 3' and includes transactional or multi-line forms, comms facilities and Arexx support. Run-time systems are also available.

Superbase for PC:

The situation is similar to that for the Amiga, except that the top-range product is called 'Superbase 4' and includes extended and expanded memory support (given the appropriate memory driver), and a networking version is also available.

Now for a couple of tips:

Small businesses often want a simple non programmed application to do such things as reflect stock control on data-entry. The easiest way to explain is by example:

Consider a Stock file with the following fields

On_order
Goods_recieved
In_Stock
Goods_out
YTD_Useage

On entry into any of these fields it is required to adjust the values to reflect the current situation. e.g. On receiving stock from a supplier, the goods in stock will need to be increased and the goods on order reduced; a similar calculation needs to be done to take account of stock usage. Many people try to do this by using self-referencing calculations and come to grief.

The easy solution is to set a function key to do the calculations, and use this instead of ALT/S (Right-AMIGA/S) to save the record after entering data. In the above example the key would have:

```
FILE Stock : On_order = On_order - Goods_received : In_Stock.stock =
In_Stock + Goods_received - Goods_out : YTD_Useage = YTD_Useage -
Goods_out : Goods_received = 0 : Goods_out = 0 : STORE
```

<<of course, the above is all on one line>>

Note (1) the clearing down of the fields Goods_received and Goods_out. If you wished to retain these (say, for reporting purposes) until next entry, you could, but then the fields would need to be manually cleared next time around. (of course, you could modify the function key to clear them, enter data, do the calculations and store but the system would be open to abuse)

Note (2) that in a multifile environment you may need to add file extensions to the fieldnames.

To have a self-accumulating field on a file In an environment like a cash-book, it is sometimes convenient to have a 'Total Year-to-date' field which shows the current situation. This cannot be done by a self-referencing calculation such as:

```
YTD = YTD + Amount
```

What is needed is the following type of setup:

a) the file must have an index which enables the last entered record to be selected, (in my example I'll call it 'keyf') In the case of a daily single entry

cash-book, it could be the date; in the case of recording cheques, it could be the cheque-number; etc., etc.

b) the field to add in is called 'amount'

c) the field to be added to is called 'YTD'

d) set up a function key with

```
SELECT LAST INDEX keyf: x% = YTD : BLANK : ENTER: YTD = x% + Amount : STORE
```

and use this function-key to enter and save records

** NB ** In a multifile environment you may need to add references to the file in the 'select','enter','store' and as extensions to the fieldnames.

Pictorially the effect is:

```
last record: keyf: 100025                new record: keyf: 100026
        amount:  123.45 ->                        amount:   99.99
           YTD:  1000.00  ^                >------ YTD:  1099.99
                          ^                ^
                          > x%=1000 >------>
```

The same sort of procedure could be used to update an existing record as follows:

a) Select your record

b) Function key reads:

```
x% = YTD : amount = 0 : ENTER : YTD = YTD + amount : STORE
```

(see note above re multifiles)

The effect of this is that the record continually reflects the last amount entered, and the current running total.

Now for a way-out of a nasty problem:

Generally, to recover files that have become corrupt with Error 200/201/202 use either EXPORT/IMPORT or SYSTEM-REORGANIZE (or the equivalent DML commands) as the manual suggests. But there are scenarios where reorganize

is not the best way. I am going to deal with the most serious first.

a) The file is unopenable because of error 201:

Action:

1) Make a copy of the .sbd for safety
2) Edit the .sbd file in the Text-editor to eliminate the first index, save the text and try to reopen the file. With luck, the file will now open. ** Make sure that you do not remove all the indexes ** Now goto Action 4
3) If action 2 fails

   i) Restore your original .sbd (from Action 1)

   ii)Create a brand-new file with only one field (let's call the file (ubiquitously!) FRED). Do not enter any data

   iii) Locate the first index in your damaged file (I will assume that the file is called XXX.2) and using Superbase, delete XXX.2 then copy FRED.1 to XXX.2 (What you have done is to copy an empty index onto a faulty index in your file)

   iv) Now open your file
4) Now REORGANIZE your file

b) The file is openable but REORGANIZE doesn't get as many records as you would expect by a long way.

In this case try the following Action:

1) Open the file and use QUERY with absolutely nothing in any of the boxes. This will give an indication (in terms of a number of screenfuls) of how many records it finds. If it looks good enough, then QUERY to FILE to create a new database.
2) If that isn't good enough:

   i) Use QUERY again, but this time specify an Index as order - do the count, and when it cracks-up, note where it stopped, redo the query but specifying the same index DESCENDING. recount, and if it cracks-up with no overlap, but not far away from ASCENDING crack-up then we have a chance.

   ii) Using QUERY, create a 'pseudo-export-file' as follows ** Use the key word FIELD to eliminate fieldnames ** Specify all fields with an intervening character (I usually use ~ which is CHR$(126)) eg: field1, ,field2, ,field3, etc (IMPORT/EXPORT parameters will be 126/13)

   ** Make sure that your printer preferences are set long enough so that all

of one record will fit on one line. (If everthing is too long, then try using the keyword DOWN, specify each field by name, and add the special character after the last field only. (IMPORT/EXPORT parameters 13/126,13))

** Run the two queries (ie ASCENDING and DESCENDING) with output specified to DISK and create two 'export' files

iii) Now using an emptied copy of the original file import these two files - remember to set your IMPORT/EXPORT parameters.

If everything fails then I have no further help to offer.

Please remember that the bottom line is: IF IT IS IMPORTANT, ENSURE THAT YOU DO REGULAR BACK-UPS

MULTISOFT ASSEMBLER - REVIEW AND OFFER

by Joe Griffin

A long, long time ago when the PET was young, an enterprising man called Richard Leman wrote an assembler for the 2001. With only 8K available (hear that all you Amiga-ites), he was very limited on what features he could include in the machine. As other machines were introduced so Richard's assemblers grew. At the same time, so did his reputation. In 1985 Commodore asked Richard to produce an assembler package to run on their then current machines; 64, Plus/4 and 128. This package was to be sold as a Commodore product under the Multisoft name.

When Commodore left Corby, they had a large number of copies of the Multisoft package. Some of these have found their way to us at ICPUG. We are giving these away to members, in return for a donation to club funds.

So what, I hear you ask, do you get for your £5 (including p&p)? Firstly there is a disk containing an assembler and editor for each of the three machines. The C-64 version includes DOS support and a monitor. A number of example programs are included on the disk.

The editor provides the features one has come to expect of an assembly language editor: Auto line numbers, Delete, Find, Change, Renumber, Do (the first line), Scrolling (using the function keys). Most of the commands can be used in BASIC programming as well, hence the title of the package.

The assembler is similar to the Commodore Assembler from the PET library, it is not a full macro assembler (but how many people really need one) and uses the standard MOS op-code instruction set. Four types of output file can be generated - Listing, Interface, Program and Symbols. The amount of material in the listing file can be controlled using the assembler options and directives. The interface file is similar to the Object file of the PET assembler, it is needed if the output is to go to the JCL EPROM programmer. The program file contains a direct binary version of the output and the symbol file contains the addresses of all labels used in the program.

The assembler can be run with a SYS call, containing the file name and assembler options. By this means, a BASIC command file can be written to control the entire assemble process.

Finally, the package comes with a detailed 60 page A5 manual, describing the operation of the package. Well worth having. If you have a C-64, Plus 4 or 128 and would like a copy of the package, send £5 to the Discounts Officer - by doing so, you will be getting an excellent package very cheaply and will be helping club funds.

ICPUG REGIONAL GROUPS

Regional Organiser Brian Wise

Location	Organiser	Phone	Meets
Ayr, Scotland	John Smith	0292-261408 x 202	3rd Wed.
Basingstoke, Hants	Colin Smith	0256-55262	1st Mon.
Bristol	Robert Paterson	0272-521879	
Bury St. Edmunds	Alan Morris	0359-51355	2nd Wed.
Camberley, Surrey	Stephen Futcher	0276-72873	3rd Wed.
Canterbury, Kent	Ron Moseley	0622-37643	1st Wed.
Coventry, West.Midlands	Will Light	0203-413511	1st Wed.
Derby	Ray Davies	0332-41025	2nd/4th Tues.
Dublin	Geoffrey Reeves	0001-883863	
Durham	Jim Cocallis	091-3867045	
Edinburgh	Martin Lowe	031-5574242	
Stevenage, Herts	Brian Grainger	0438-727925	Last Fri.
Liverpool	John Swallow	051-5216910	Wed.termtime
Macclesfield	Melvin Mayers	0625-32852	Alt.Tues.
Mildenhall, Norfolk	Joe Bowman	036283-8439	
Min. of Defence	John Jeffrey	01-218 0988	Monthly
Mid Thames Reading	Brian Jones	0734-661494	2nd Thurs.
North Gloucester	Closed temporarily		
North Hants Farnboro'	Ron Geere	0256-26830	3rd Wed.
Paisley, Scotland	Charlie Heath	041-8898929	
Sheffield	Phil Hicks	0742-682275	
Solent, Titchfield	Anthony Dimmer	0705-254969	1st/3rd Tues.
South East Group,	Brian Wise or	0903-787559	Thurs not 1st
Biggin Hill	John Bickerstaff	01-651 5436	
South West Group	Peter Miles	0297-60339	2nd Sunday
Watford	Rod Eva	0923-50161	3rd Wed.
West Riding Group	Kevin Morton	0532-537318	1st/3rd Wed.
Wigan	Bryan Caswell	0942-213402	
Wolverhampton	Mr. Whiteley	0902-733332	
Disabled Group	David Bate	0296-842707	
1520 Plotter Group	John Bentley	06286-65932	
Penpal Group	Ian Cassidy	9 Haldane Crescent, Kirkton, Dundee DD3 0JN	

MID-THAMES GROUP NEWS

by Mike Hatt.

On December 8th. 1988, the Mid-Thames Group held a pre-Christmas Party at the usual venue of the Bourne End Community Centre. On this occasion we were packed into the cramped dressing-room area. However Brian Jones and his organising team had provided some good 'eats' and the bar was only a short walk away. In the background there were dulcet sounds from the ballroom where the old time dancers were holding THEIR regular meeting. (In case you wondered, both the dancers and dances are old-timers I guess, but quite a nice bunch of folk).

I was showing off my new PC-1, of which I will be writing in more detail in due course. Pete Maclaurin brought a trusty PET and got a lot of people hooked playing what may be the original home computer version of Space Invaders. The rest of the room was the usual massed phalanx of Amiga 500s; I must ask how some of the younger lads can afford them...

Apart from the usual activity with our machines and looking over to see what others were up to with their machines, we swapped news, including hearing that Brian hopes to have some interesting speakers during the early months of 1989. However, Brian is finding less and less time for ICPUG work as his job becomes wider-ranging, so there is to be some swapping around of duties to spread the load.

In particular I have offered to take on publicity and recruitment work, and liaison with ICPUG National. So from now on, anyone in the Reading / Maidenhead / Slough area and reasonable travelling distance around who would like to know more about our group and come to our meetings, please contact me as follows:

Michael G. Hatt, 11, Jones Way, Hedgerley, SLOUGH SL2 3YF
Telephone (Home): Farnham Common (STD 02814) 5728.
Compunet: M.HATTER (please note the full stop!)

You may have to put up with my rather slow starting Betacom answering machine which I hope will be on when I am not immediately available at home. If this fails, or if you need an emergency response during office hours, I can be reached on Slough 33333 ext. 225 (Amenity Officer, Planning Department, South Bucks District Council - if in doubt pretend you have a sick tree!).

The Mid-Thames Group meets on the second Thursday of the month at the Bourne End Community Centre, either in the Youth Club Room or the Dressing Room. Arrive with machines from 7-7.15 pm. to set up, main business normally starts at 7.45 pm.

ICPUGSE

by Brian Wise

Once again ICPUG South East rounded off a very successful year with their Christmas Cracker evening. This is an open night given over to eating, drinking and playing computer games, and a good time was had by all. Already there are plans to make 1989 even better and more events are planned.

South East meet at Biggin Hill Library, Church Road, Biggin Hill, Kent on the 2nd, 3rd, 4th and 5th Thursday of each month at 7.45pm. The 3rd Thursday is their lecture night and the rest are open nights for members to bring along their computers. The fourth Thursday is a Course night as well as the open night and members are learning C or other languages.

The Lectures start on January 19th with Simon Tranmer; 'Simon's Super Show' and are followed by

16th February	Drawing on the Amiga	David Annal
16th March	Don's A Good Sort!	Don Skene
20th April	PS/2 Demonstration	Richard Hunt

Other lectures planned include Microtext, Communications, Midi and possibly Jim Butterfield.

April will see ICPUG South East at The Queen's Armes Hotel in Charmouth, for their 3rd annual visit. Members will once again indulge in a fantastic weekend of computers and gourmet food.

October sees some members making another pilgrimage to Lourdes and the Pyrenees. It is as serious or light-hearted as you like to make it - eggs and bacon at 2 am. [That's serious! -Ed] Some members have been regularly for the last four years, thanks to the cut-price weekend offered by one of South East's members. As well as these trips there are visits to local restaurants, so that the wife is not left out in the mad pursuit of ones computer.

South East welcomes anybody to come along to their meetings, and looks forward to them realising the enjoyment that they can obtain out of computers and good friends. Further information on South East can be obtained from John Bickerstaff (01 651 5436) or Brian Wise (0903 787559).

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BRIAN'S BLUNDERINGS

by Brian Fowler

I've been exploring the Amiga with C, and following the last instalment of this occasional series, I have been looking at the way Intuition handles windows. It may be of interest to readers who, like me, are trying to master the Amiga, to tackle the writing of a small window handling utility.

Amiga owners will know that it is possible to tidy up the icons within an open window by selecting Clean Up from the Workbench menu. There is no equivalent system function to tidy up a workbench cluttered up by open windows however, so this is the problem I decided to address - to write a small program which will pick up each open window in turn, shrink it and then stack it neatly down the left hand side of the screen.

Before we go any further, I'll repeat my remarks of last time; I am trying to teach myself the C language, and offer the following program as a working example only. If there are any C experts out there who can point out errors in my programming, then don't be shy, share your wisdom with all of us!

Having got that out of the way, let's look at some of the things I found out about the Amiga's operating system whilst writing this latest masterpiece.

First, the Amiga's window system is managed by Intuition, an extremely sophisticated part of the operating system which looks after the machine's user interface, the clever bit that allows you to run a program, for example, simply by clicking on an icon. In general, when running under Workbench, each disk directory appears in a window of its own, and any currently executing program will have at least one window open. So how does Intuition keep track of all these open windows?

Well, the IntuitionBase structure contains a pointer to the data structure which represents the currently active screen, which in turn holds a pointer to the first window (of that screen). With me so far?

So by looking at the IntuitionBase structure, we can find the currently active screen, and then find the first window in that screen's list of open windows. If the pointer to the first window is NULL, or machine zero, then this indicates that there are no open windows in that screen. Assuming that there is a first window, we can manipulate the data structure for that window, and then examine the pointer to the next window. Again, if the pointer is NULL, then there are no further windows; we've reached the end of the list. In this way, we can traverse all the linked lists which are maintained by Intuition. Perhaps the following will help to illustrate the point. There is a program called

Structure Browser which was printed in Transactor magazine (it's also on the Fish disks, I believe), and using this program on my machine gave the following results :-

The address of the IntuitionBase structure is $C03E2C

The fourth member of this structure is a pointer to the ActiveScreen structure, the address of which is $C07E30

The second member of the ActiveScreen structure is a pointer to the FirstWindow structure. The value of this pointer is $C33AA0, so the FirstWindow structure can be found at this address.

[Editor's note: The addresses given apply to Brian's machine only; they may be different in your particular set up]

Now that we have found the representation of the first window, we can start to enforce our will on the machine. The first thing we need to do is to test to see if this particular window has a sizing gadget. If there is a sizing gadget present, we'll assume it is safe for us to resize the window. Chances are that if the application programmer didn't provide a sizing gadget, strange things will happen if we come in and give the program a smaller window than it is expecting. If there is no sizing gadget, therefore, we will move quickly on to the next window in the list (assuming that the NextWindow pointer isn't NULL - remember?)

If there is a sizing gadget, we can call a system function to resize the window for us. The SizeWindow() function is, you will agree, aptly named for this job, as is the next function we call, WindowToFront(), which as the name implies puts this window in front of all others on the screen. Finally, we call MoveWindow() to put the window at the top left hand edge of the screen. The same cycle is followed for any subsequent sizable windows, except that we arrange to MoveWindow() ten scanlines further down in each case. In this way we end up with the windows stacked neatly down the left hand side of the screen, with each windows title bar visible.

Eventually we reach the end of the list, so we can exit gracefully. Incidentally, if you compile the following program without the check for each window's sizing gadget, you will prove to yourself that the WorkBench Screen is in fact a non-sizable backdrop window. You will also have to watch your Amiga reset sequence!

Any comments, suggestions etc.....write to your editor.

Program follows.....

```
#include <intuition/intuitionbase.h>
#include <graphics/gfxbase.h>

/* the above includes tell the compiler about the relevant data structures. Now
we will declare some useful variables. */

struct IntuitionBase *IntuitionBase;
struct GfxBase *GfxBase;
struct Window *FWindow;
struct Window *Next;
struct Screen *AScreen;
ULONG sizing_gadget;
COUNT pos;

/* Tidy.c          22nd July 1988      Brian Fowler. */
/* Finds active screen, then shrinks all windows having a sizing gadget and
stacks them neatly down left hand side of screen Compiles with Lattice 4.01
(4876 bytes) */

void main();

void main()

{

/*  We now attempt to open the Intuition and Graphics libraries - if we fail to
open either of these, then the machine is in trouble and we get out quick! */

if((IntuitionBase = (struct IntuitionBase*)
OpenLibrary(intuition.library,33)) == NULL) exit(1);

if((GfxBase = (struct GfxBase*)
OpenLibrary(graphics.library,33)) == NULL)
exit(2);

/*  If we are here, then we successfully opened the libraries, and we can
proceed. First, we set  pos' to zero. This is the variable we will use to position
the resized windows down the screen  */
```



```
pos = 0;

/*  The Amiga is a multi tasking machine, so we'll want to prevent anyone else
playing with Intuition's lists while we are using them  */

Forbid();

/*  Now we can pick up the Active Screen.....  */

AScreen=(struct Screen*)IntuitionBase->ActiveScreen;

/*  and then set FWindow to the first window in this screen's Intuition-
maintained window list */

FWindow=(struct Screen*)AScreen->FirstWindow;

/* While we're here, we can pick up the next window-if any */

Next = (FWindow->NextWindow);

/* Now we can do a 'while' test, to make sure we don't fall off the end of the
list. */

while (Next >NULL)
  {

/*  First, we'll pick up all this window's flags  */

   sizing_gadget=(struct Window*)FWindow->Flags;

/*  then we AND the flags with the predefined WINDOWSIZING constant  */

   sizing_gadget=(sizing_gadget & WINDOWSIZING);

/*  so now we know whether the window has a sizing gadget  */

   if (sizing_gadget > NULL)

/*  if there is a sizing gadget, we do the business.....  */
```

```
    {

/* size the window to 40 pixels high by 200 wide. */

    SizeWindow(FWindow,(200-(FWindow->Width)),(40-(FWindow->Height )));

/*  then bring it to the front  */

    WindowToFront(FWindow);

/* and then stack it - zero pixels from the left edge, and  pos' pixels down  */

    MoveWindow(FWindow,(0-FWindow->LeftEdge),
            (0-(FWindow->TopEdge) +pos));
  }
/* Having dealt with that window, pick up the next one. We know that there is
a next one, because we tested at the start of the while loop  */

  FWindow = FWindow->NextWindow;
  Next = (FWindow->NextWindow);

/* Before we go round again, add 10 to the vertical position so that the next
window is stacked 10 scanlines lower down the screen  */

  pos += 10;
}

/* to get here, we must have failed the 'next window' test, so it's time to wrap
up, using the complementary function to  Forbid' */

Permit();

/* and then politely closing the libraries we opened  */

CloseLibrary(IntuitionBase);
CloseLibrary(GfxBase);
```


PET PRATTLE - 6

by Joe Griffin

Extended Memory - 8096 & 8296

As I mentioned earlier in this series, in 1981 Commodore introduced a variant of the 8032, with additional memory. This machine, called the 8096 because of its 96K of RAM, did not give the user immediate access to the full memory. At start up the familiar "31743 bytes free." message appeared. As far as the BASIC programmer is concerned, these machines are 8032's; there is no extra memory available.

Commodore made the 8096 available as a machine in its own right, or as an upgrade by way of a user (or dealer) installable board containing the additional chips. There were at least two independent boards available at the same time, though from my own experience I can say that one at least of these was not fully compatible. On my machine at work, we upgraded to 8096 with a third-party board. This promptly crashed the machine. After two months of to and fro'ing with our dealer we discovered that a detail change in the mother board of one series of 8032's was compatible with the CBM board but not the third party one. Our eventual solution was to fit a genuine Commodore board.

With the expansion (either as a board or a complete machine) came the customary collection of paper and a disk (4040/8050 flippy).

Of the documentation supplied, the fitting instructions, instructions for a demo / test program and assembler listing for a program to 'toggle most of the gates within the 64k add-on' were trivial. The user guide, while still of the usual Commodore standard did give 7 pages over to operation, while the assembler listings of the extended memory monitor, soft-system loader and 'Expanded BASIC' provided a useful amount of information.

The disk included both assembler source code and binary programs for the three programs mentioned above, together with soft-loadable versions of BASIC 2 (Upgrade ROM) and both 40 and 80 column BASIC 4.

The source code for both Add-on-Load and Add-on-Mon contained small bugs. In Add-on-Load, if the named operating system could not be found, the program re-tried for a new file name but no message was displayed. There was no graceful exit from the program. Two simple mods to the source correct this. In Add-on-Mon, the bug is more severe. When performing a SAVE from the monitor, the pointers to the start address of the save were not set up - fine if the program just loaded was being re-saved, but disastrous otherwise.

The Extended BASIC program is definitely the one used to prove the definition of 'Test Data'. For those who do not know it "Test Data is that Unique set of data which allow the program to work". In the case of Extended BASIC, a set of example programs were supplied. These worked! I never got any real examples to, nor did several correspondents of mine.

Expanded BASIC was supposed to be a pseudo-cache system, storing programs in the expansion and allowing them to be rapidly paged in or out of conventional memory. If anyone did manage to sort out the bugs and reliably make it work, then I would be interested to hear from them or receive a copy of the modified routine.

Hardware

The 64K of RAM on the expansion board was configured as 4 blocks of 16K. Blocks 0 and 1 mapped into the range $8000 to $BFFF and blocks 2 and 3 mapped into $C000 to $FFFF. If the expansion was enabled, two of the blocks replaced the upper 32K of the 8032.

Control of the expansion was through a single write only control register at $FFF0 (65520.) The bits of this register were used as follow:

```
Bit 7 - Enable (1) or Disable (0) the expansion memory
    6 - Enable (1) or Disable (0) I/O peek through ($E800 - $EFFF)
    5 - Enable (1) or Disable (0) Screen peek through ($8000-$8FFF)
    4 - Reserved
    3 - Selection of 16K block for $C000-$FFFF (0=block 2, 1=block 3)
    2 - Selection of 16K block for $8000-$BFFF (0=block 0, 1=block 1)
    1 - Enable (1) or Disable (0) write protection for $C000-$FFFF
    0 - Enable (1) or Disable (0) write protection for $8000-$BFFF
```

If I/O peek through is enabled (bit 6 set) then I/O is not write protected, irrespective of the state of bit 1. Similarly, if screen peek-through is enabled, then the screen is not write protected, even if bit 0 is set.

The simplest way to check whether an 8032 has the expansion board fitted is to POKE 65520,227 if the machine crashes irretrievably then there is an expansion fitted. If it does not crash, then there is no expansion; the poke had no effect and the 8032 continued operating from ROM.

For the 6502 microprocessor three important hardware vectors are stored in ROM at $FFFA - $FFFF. These vectors are non-maskable interrupt (NMI), reset and interrupt request (IRQ). In order for the 8096 to use the expansion memory there must be a valid address in the 16K block in use (unless interrupts have

been disabled by an SEI command before the expansion is turned on). The User Guide contains an example of the sort of routine required. This disables interrupts (SEI) and sets the vector addresses to point to code in conventional RAM. The code merely switches out the expansion, carries out the required interrupt and returns to the expansion. As mentioned above, the control register is write only, so it is up to the user to keep a record of what expansion configuration is in use.

Software

All this was pretty tiresome stuff if you were not a machine code addict, or if you just wanted to use BASIC. There were a couple of packages around which did allow the BASIC programmer to use the expansion. When we got our 8096 at work, our dealer supplied us with a program called LOS-96 (Loadable Operating System). This allowed 32K for BASIC and 32K for variables. The other main features of the system were:

Virtually unlimited FOR/GOSUB stack
Program change without loss of variables
ESC key functions for screen control codes
Automatic program line numbering
Line/block Delete facility
Device 8 default for load/save
REDIMension single dimension arrays
RESTORE to a given data item
Improved string handling (GET$, INSTR, MIDSTR)
IF ... THEN ... ELSE supported
ON ERROR construct
PRINT at and PRINT USING were both provided

There was also a 'System 96' package available from Dataview which allowed access to the expansion memory. This could interface with the DTL Compiler to allow compiled program using more than 32K. Unfortunately the PetSpeed compiler was never released in a 96K version, though this was planned at one stage.

One other program was available which made use of the expansion memory, and which allowed access to more than 31K for non-machine code programmers. COMAL was released for the 8096 in version 1.02 which gave a very useful amount of workspace.

Most of us used our 8096's to run commercial packages. One of the first

was Visicalc (as I mentioned in Prattle 4) others were Silicon Office, Calc-Result and Precision's threesome; Superscript, S-base and S-office (the latter being a combination of the two others). All these packages are large programs and in an 8032 would have little or no work space. By making use of the expansion memory area, they allow the programmer to have his cake and eat it!

For machine code programmers, a non-commercial, but excellent, program which makes use of two banks of the expansion is the Go-faster Assembler, written by David Prentice of ICPUG-SE. This can be 'installed' so that it is co-resident with the source code. This allows much faster assembly, as there is no reading from disk, merely from RAM. I was fortunate enough to be given the source code by David, so I was able to modify it slightly to allow it to use the other banks of the expansion as the 'ROM'. I will explain this further.

Soft-loaded systems

On the disk supplied with the 64K add-on was a short program called 'ADD-ON-LOAD', together with its source code. When loaded and run, this program requested the name of a SYSTEM, which it then loaded from disk. On the original disk were three systems 'BASIC 2.0', 'BASIC 4.0/40' & 'BASIC 4.0/80'. Any of these systems could be loaded, so you could, for example turn your 8096 into a 3032, with Business keyboard. So far, so good.

As I mentioned in Prattle 5, the Basic-Aid program added many programmer's commands to BASIC. The source code of this utility allows it to be assembled for ROM, the idea being that it could be blown into an EPROM for one of the empty slots in the PET, thus saving 4K of RAM. On my system, I assembled it to use the $A000 slot and similarly assembled MICROMON to use the $9000 slot. By using Add-on-Load to load a soft version of 80 column BASIC 4, I could then poke location 65520 with 224 (to remove the write protection) and load in the two sets of EPROM code. Using the built-in monitor (as Micromon does not recognise $G000 as a valid address), the memory from $9000 up to $FFFF could be saved to disk (remembering to allow one extra byte to get over the bug in the save routine). From then on, the Add-on-Load program could be used to bring in the extended operating system just created.

Similarly, when Tom Cranstoun let me have a copy of the source code for his Scrolling Editor, a copy of this was prepared for the $A000 slot. When I want to work in machine code, I can load the soft-system containing the editor. If I want to go over to BASIC, I merely replace it with the one containing BASIC-Aid.

By loading one operating system into banks 0 & 2, and the other into 1 & 3 (using a modified version of Add-on-Load), it is possible to switch between

them, without disturbing the program currently in memory. As long as the 'EPROM' has been disabled (with KILL, or whatever), a direct POKE to address 65520 will flip between systems. The following values cause the expansion to enable the memory blocks indicated

```
POKE 65520,224 - Blocks 0 & 2 write enabled
         227 - Blocks 0 & 2 write protect
         230 - Blocks 1 & 3 write enabled
         233 - Blocks 1 & 3 write protect
```

This can of course be just the start! My PET was hooked up to an Epson FX80, which had a normal IEEE card, not one giving conversion to PETSCII. Many moons ago, Lee Allen of Altek wrote an article for ICPUG-SE detailing a modification to the 'F' ROM which allowed true ASCII output to channel 5 of an IEEE device (unit 4 or greater). My soft-loaded system includes this modification. To obtain correct printing from the Epson, I 'OPEN 5,4' and the modified code handles the conversion.

Other features which I wanted on my system, and which could be easily patched in to the operating system, included the ability to recognise hex numbers and to provide a conversion from decimal to hex, with a new keyword HEX$. Computed GOTO/GOSUB were also included as was RESTORE to a line number. The ability was also included to produce certain graphic characters by pressing shift with single character keys (square-brackets, commercial-at, left-arrow, up-arrow, back-slash and numeric keypad).

The 8096 was a very versatile machine; little wonder that it made Commodore the leaders in business micros. A lead which they lost with the 700 when the rest of the industry was turning to the 8088 and IBM compatibility. The final testimony to the 8096 must come from Commodore who re-introduced it after the 700 was abandoned. In its new guise as 8296, with the -D (disks) and -GD (hi-res graphics & disks) variants it had a further lease of life. Just recently I heard of a dozen 8296 for sale at under £50 each - anyone interested?

Next time I will talk about Commodore IEEE disk drives.

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PRINTER

- Graphic printing is up to 10 times faster
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- Graphic prints can be smoothed to make clean looking characters

SHELL

- Upgraded CLI environment
- Saves typing by using full-line editing
- 'History capability', remembers previous commands
- Command aliases

MATH LIBRARY

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- Math operations, in programs using libraries, speed up automatically
- Library automatically uses a 68881 Math Coprocessor with 68020

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- Text printing to the screen is up to 4 times faster

RECOVERABLE RAM DISK

- Keeps its contents until the Amiga is turned off

ADOBE SCREEN FONTS

- Extras Diskette includes: Times Roman, Helvetica Courier and Symbol Fonts

USE A TERMINAL WITH THE AMIGA

- AUX: allows a second terminal to use CLI commands

ADD SPEECH OUTPUT TO PROGRAMS

- Allows many programs to speak

IMPROVED COMMANDS

- Scripts generated with user-supplied output format
- Improved comparison and looping facilities

A NOTE FOR YOUR DIARY

The third Annual General Meeting of ICPUL will take place on Saturday 6th. May 1989. It is scheduled to commence at 2:30 p.m., and is to be held at the Charing Cross Hotel, Strand, London. A full agenda and other information about the A.G.M. will appear in the next issue.

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KERNAL CALLS - 5

By Ian Cassidy

In the last article we looked at loading files. This time we will look at the routine that allows us to save files. In the earlier BASIC languages there was no block save command, and yet the Kernal routine which could easily achieve this was practically ignored.

SAVE	SAVE RAM to device
CALL ADDRESS	$FFD8 (65496)
COMMUNICATING REGISTERS	A,X,Y
REGISTERS AFFECTED	A,X,Y
PREPARATORY ROUTINES	SETLFS,SETNAM

As you can see the same preparatory routines that were used in conjunction with the LOAD routine are also required here. Since they have already been discussed there is no point in repeating them. To save an area of memory to tape or disk it is necessary to specify the start and end addresses. This can be done by storing the start address in two free zero page locations, and the end address in the X and Y registers prior to calling SAVE. The following program will save to disk from memory location $0C00 to $0C22 with the filename "CBM".

```
$0C00 LDX # $08          ; Device 8 for disk
$0C02 JSR   $FFBA        ; Call SETLFS
$0C05 LDA # $03          ; Set length of filename
$0C07 LDX # $20          ; Set low byte of filename
$0C09 LDY # $0C          ; Set high byte of filename
$0C0B JSR   $FFBD        ; Call SETNAM
$0C0E LDA # $00          ; Get low byte of start address
$0C10 STA   $FB          ; Store in zero page location $FB
$0C12 LDA # $0C          ; Get high byte of start address
$0C14 STA   $FC          ; Store in zero page location $FC
$0C16 LDA   $FB          ; Accumulator gets start address pointer
$0C18 LDX # $22          ; Set low byte of end address
$0C1A LDY # $0C          ; Set high byte of end address
$0C1C JSR   $FFD8        ; Call SAVE
$0C1F RTS                ; Return from subroutine
$0C20 BYTE $43,$42,$4D   ; Filename CBM
```


If you have any problems with any of the routines that we have looked at so far, you can contact me at the following address. 9 Haldane cresent, Kirkton, Dundee. DD3 0JN. Please quote your current ICPUG membership number and give a details of the problem, preferably with a listing of any problem routines.

Multiple errors

The program and article on multiple screens which appeared in the last newsletter had a few errors, which I will now endeavour to put right. I sent the wrong file so I am to blame. To make amends I have improved the routine by making the option for clearing the screen a lot easier to use. Instead of using location $FC to determine whether the screen should be cleared I have used the carry flag in the processor status register. If the carry flag is cleared then the screen will also be cleared. The following listing is the corrected version. Location $FB is used to select the screen, and the value must be 0, 1, or 2.

```
$0C00  LDY  $FB                ; Load Y register with table value
$0C02  lDX #$0C                ; Load X register with register number
$0C04  lDA  $0C2C,Y            ; Get high byte from table
$0C07  STX  $D600              ; Write register number to $D600
$0C0A  BIT  $D600              ; Check if bit 7 is set
$0C0C  BPL  $0C0F              ; No - then wait
$0C0F  STA  $D601              ; Pass new high byte
$0C12  STA  $0A2E              ; and also to zero page pointer
$0C15  LDX  $0D                ; Load X with register number
$0C17  LDA #$00                ; Load A with low byte
$0C19  STX  $D600              ; Write register number to $D600
$0C1C  BIT  $D600              ; Wait
$0C1F  BPL  $0C21              ; Wait until value written
$0C21  STA  $D601              ; Store low byte value
$0C24  BCS  $0C2B              ; Exit routine if carry flag set
$0C26  LDA #$93                ; Get code for CHR$(147)
$0C28  JSR  $FFD2              ; Call CHROUT to print
$0C2B  RTS                     ; Return from subroutine
$0C2C  - $0C2E                 ; BYTES  $00, $10 ,$18
```

The code to call the routine with the screen set to $1000 and without the screen being cleared on entry is:

```
LDA #$01          ; Get byte from second table position
STA  $FB          ; Store in $FB
SEC               ; Set carry flag
JSR $0C00         ; Call routine
RTS               ; Return
```

Passing parameters

Tucked away in the Commodore 64 ROM is a handy little routine which will allow you to pass parameters from Basic to a machine code program. This routine is located at hex address $B7EE. When you call this routine the value sent is returned into the X register. In the example routine three parameters are passed by the system call and stored directly in the screen, border and character colour code locations.

```
SYS 49152,6,14,1
```

And the code at 49152 ($C000)

```
JSR $B7EE          ; Call ROM to get first parameter
STX $D021          ; Store X in Screen colour location
JSR $B7EE          ; Get second parameter
STX $D020          ; Store X in border colour location
JSR $B7EE          ; Get third parameter
STX $0286          ; Store X in Colour code location
RTS                ; Return
```

There are many different uses for this routine but one of the most useful is a cursor plot routine.

```
SYS 49152,10,10      ( SYS 49152,X,Y )
```

And the code at 49152 ($C000)

```
JSR $B7EE          ; Get first parameter
STX $FC            ; Store in zero page
JSR $B7EE          ; Get second parameter
TXA                ; Transfer X into A
TAY                ; Transfer A into Y
LDX $FC            ; Retrieve first parameter
CLC                ; Clear carry flag to plot
JSR $FFF0          ; Call kernal Plot routine
RTS                ; Return
```


EXTERNAL DRIVE SWITCH

by A K Tilley

When I purchased a second drive for my Amiga 500 I thought that life would become so much easier. This was the case, apart from a couple of minor niggles which became major niggles as time went on, at times threatening to drive me to distraction.

The first problem was that the external disk drive on the Amiga clicked away in a fashion which could only be likened to the ancient Chinese water torture when no disk was present. The second problem, even more annoyingly, caused the Amiga to hang up because the software that you were trying to load, didn't like the presence of an extra drive. This second problem was usually caused by copy protection or memory limitations and was one that I decided I would try and solve if at all possible, as the constant plugging and un-plugging was worse than the clicking of the drive, not to mention the wear and tear on the drive port!

Whilst thumbing through Amiga User, I noticed an advertisement for a device which would solve the problem. This device fits in between the drive plug and the drive port on the rear of the Amiga and at ten pounds seemed a bargain. I gave it some logical thought and I didn't like the idea of adding another forty six connections between the drive and the Amiga, because most of the pins are used, and should one bad connection arise then problems would surely follow, possibly whilst saving some masterpiece!

I did some research and discovered that the only connection that needs to be disturbed is pin number twenty one in the plug, which just happens to be the DF1: drive de-select wire. The schematic circuit drawing in the Amiga manual confirms this for the sceptical, as I am extremely wary of tinkering with something as technical as the Amiga even when I think I know what I am doing!

The first step was to dig out my copy of the Maplin catalogue to see what kind of switches were available and whether they would be suitable for the application in question. Fortunately, Maplin sells a range of ultra-miniature switches, one of which was perfect for the job and at a cost of eighty eight pence seemed a real bargain! The details of the switch are as follows. Ultra Miniature toggle switch, catalogue number FH97F. SPST. One required.

The first step towards fitting the switch is to disconnect the drive and remove the outer casing of the plug by removing the two retaining screws and gently untwisting the wires to allow the location of pin twenty one.

The wire connected to pin twenty one should now be de-soldered and carefully pulled clear of the connector for later use.

The next step is perhaps the trickiest as you have to decide exactly where you are going to locate the switch, which has to be fitted through the top half of the plug cover but so as not to foul the wires inside. I found that with a bit of careful thought the exact position was easily located, although it is a fairly tight squeeze.

Now you have decided the exact position of the switch, you must carefully make a hole in the top of the switch casing, trying to keep it a good fit. I found that as the plug was plastic, the hole could be made with a drill-bit hand held and just twisted through the plastic quite easily. The switch is now passed through the cover and the locking nut gently tightened.

Once the switch is in place, the next step is to solder the loose wire that you removed initially, onto one terminal of the switch and a short piece of wire onto the other terminal of the switch. This loose end should now be connected to pin twenty one and the plug cover re-assembled. The job is now done and all that remains is to re-connect the drive, stand back and switch on. When all is well you will wonder how you managed without this very simple modification which incidentally could have been done by the drive manufacturers even more cheaply than the eighty eight pence it costs us to do it for them!

One word of warning though, in all probability you will invalidate your warranty although I feel it is definitely worth the risk.

At a cost of eighty eight pence I can recommend this modification as essential. If you are not too competent with a soldering iron then why not ask a friend who is! Good luck with the modification, it is certainly worthwhile as mine has worked flawlessly on my A500 & Evesham drive for almost two months.

I said earlier that I had an Evesham Micros disk drive for the Amiga, which I feel deserves a mention. There is not a lot to say about disk drives in general other than whether they work, are reliable and what they look like cosmetically - the Evesham drive gets full marks on all counts and I would not hesitate to recommend it especially with the de-select switch fitted! The internals are manufactured by Citizen and the whole thing is neat, quiet and functional.

When I purchase a RAM upgrade, probably the C.B.M. 512k version, I will study the possibility of fitting a similar type of switch to that. Watch this space for a future article!

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C.W.'s MUSINGS

by Chris Wright.

SuperDisk

Those of you who have read my offerings will have seen me mention the new Superbase/Superscript hints/tips/programs disk being prepared by Peter Hauke. Peter has been 'preparing' this disk for the past six months and I am now given to understand it was sent to me by post. It is now officially reported 'lost' and the Post Office are quite rightly fed up with people constantly blaming them for this mammoth amount of mail that so called goes 'lost'. I tend to agree with them when they say, 'Are you sure it was actually posted?'

Anyway, all these programs and submissions have been totally lost and I now wish to start again from scratch. Will those of you who kindly sent your offering to Peter Hauke please forward them to me (I will return your disk if required) together with documentation on disk and printed to explain what it is supposed to do or to what the hint or tip refers to. The subject is only Superbase and Superscript and I can take submissions in 1581/1541/1571 formats from any Word Processor but preferably Superscript. As soon as I can I will then release this disk to the 128 library in 1581 and 1541 mode. Speed is of the essence here chaps.

Flashing neon lights

It may be too soon yet for all you writers out there to have finished your masterpiece and sent it to me to be inserted in Commodore Computing International. Just to remind you it can be on any subject and any Commodore machine.

W.P.'s and the Hard Disk

Concerning the article in the last Newsletter about Amiga W.P.'s and Data Transfer, I have received a few replies and comments but I think there must be many more of you wishing to explore this subject, or am I wrong and you all use the Amiga to play games!! I have started to reappraise Kind Words V2.0 and Excellence V2.2 and both have had serious problems corrected and new features inserted. Both have quite a way to go yet but certainly look better. Whilst Kind Words has gone down in price slightly, sadly, Excellence has been jacked-up somewhat beyond the reach of most normal wage earners and

costing nearly as much as the A500 itself!

Both can be installed on a Hard Disk. Kind Words goes on quite easily with no problems. Excellence wants to take over and re-write your startup-sequence in the S: directory. You have to load the startup-sequence into TeXeD and edit it and insert your features. Not a happy situation unless you are prepared to use two Boot disks. One for Excellence and one for the normal booting up of your hard drive. Even greater problems arise if your machine boots up directly off the hard disk with an auto-boot rom and 1.3 installed. Because of this I now have the program looking for the dictionary and thesaurus on the floppy. I have written to Micro-Systems Software Inc about this and await their reply.

Another point is that whilst Kind Words and ProWrite 2.0 will allow use in machines of 512K (but recommend 1 meg), Excellence happily states 1 meg required. Whilst the trend is towards 1 meg programs, I feel this rather cavalier attitude and the high price, will put people off a purchase. Still, I may be a little biased here.

Hard Disks

As more and more people are using hard disks, I am going to try and compile a list of those programs that store and run well easily on a Hard Disk and the others that are wallies! Anyone with comments or problems to air about this drop me a line and maybe I can make this an ongoing article to help others use their hard disk to greater advantage or to warn others of any pitfalls. One little hint. 20 megabyte drives very quickly fill up. You should really be looking for a 30, 40 or even greater storage. For those of you who are undecided which comes first, additional floppy, extra memory or hard drive. They should be in that order, unless you have some special reason to make additional memory come first. Whilst the A501 expansion is fine for 1 megabyte you may soon find you are in a bit of a cul-de-sac and need even more memory.

1.3 ROM's

Talking of problems, V1.3 kickstart Roms are finding out the Software Houses that use prohibited areas of memory. Electronic Arts did this with V1.1 and it must have cost them a bomb to get updates out for V1.2 use. Obviously some Software Houses just don't learn. If you are using V1.3 and the program crashes (usually a game) get in touch with the Software House direct, don't blame Commodore this time. They notified programmers about using these areas of memory so they have programmed their own problems. Most new A500 machines and A2000 series are being shipped with V1.3 installed.

However, you won't know it is in until you boot it up. No notes, labels or indications about this on or in the box. For crying out loud Commodore. Why do you always have to fall at the last fence on the simple things. Get your act together, and pay more attention to the details. The big things look after themselves.

COMMODORE NEWS

by Janet Bickerstaff

The Amiga's operating system - Workbench - has been updated. The disk based update will cost £14.99 (but see Discount Corner) and includes three diskettes and a manual (including Kickstart 1.3 for Amiga 1000 owners).

This eagerly awaited improvement on Workbench V1.2 brings a host of new features to the ground-breaking Amiga range. With V1.3 the Amiga is a faster, leaner and even more flexible machine.

Faster. Hard disk directories are up to ten times faster, text printing to the screen is four times faster and graphic printing is ten times faster than before.

Leaner. Math operations in programs using the libraries speed up automatically, it saves typing by using full line editing and a recoverable RAM disk keeps its contents until the Amiga is turned off.

Flexible. The library automatically uses a 68881 Math Coprocessor chip with 68020, there are 21 printer options and programs (literally) speak for themselves!

Dr. Rahman Haleem - Commodore's Technical Support Manager - says of V1.3 With the arrival of this update the Amiga has again set the pace for everyone else. With capabilities such as disk partitioning raised to 2 Gigabytes, the Amiga range looks better than ever before. It is a must for every Amiga user and an extra incentive for anyone thinking of buying a 16-bit machine.

Computer Shows

Commodore will be at the following Shows:-

Feb. 21 - 24	Which Computer? Show - NEC Birmingham.
March 14 - 16	Cadcam (Amiga 2000 Graphics) - NEC Birmingham.
May 8 - 11	Audio-Visual Show - Wembley.

REVIEW - MERLIN 128

by Ian Cassidy

Learning to program in machine code can be a daunting task, but life can be a lot simpler if you have a good Assembler program. With a £50 price tag Merlin is certainly not cheap, but I was very impressed with the power and flexibility of this software package from Free Spirit software. The hardware requirements for Merlin are listed as a 1571 drive and an 80 column monitor.

Documentation

Examining the documentation is the first item on my agenda when using software for the first time. The 146 page manual is spiral bound which makes for easy referencing. There is also a pull out page which contains a list of the 40 screen editor commands. There is a short beginners section which guides you through the first steps in assembling using the editor. The manual is quite well presented but I felt that the information supplied was a little sparse for such an extensive program. I had problems producing a hardcopy of my first attempt at assembling a routine, because the manual did not state clearly that the USER and PRTR commands must be used in conjuction with each other.

Loading and backups

Full marks given here for supplying a program which is unprotected. In my view there is nothing worse than purchasing a program from a software house only to find that you are required to part with more funds for a backup copy. There is even a utility program supplied for this purpose. Loading is initiated either by pressing the reset button or typing BOOT in direct mode. Once loaded you are presented with the main menu from which most operations are accessed. A word of praise here for the importers Financial Systems Software who, after a quick phone call, supplied a replacement disk by return of post when the original refused to load.

The main menu

The main menu is used for file maintenance operations such as the loading and saving of source, and object code files. All files are automatically suffixed with S for source, and O for object files. You can also read the directory of the disk, read and write text files, append files, run programs and most

importantly enter the editor / assembler program.

The editor

Using the editor is simplicity itself once you become familiar with the control and commodore key commands. In fact if you are have used word processing software then you will be completly at home with this editor. Source files are line numbered and great care must be taken here when deleting more than one section of code at the same time. The higher numbers must be deleted first because all the source code is renumbered after each individual operation. Source files can be created using four fields which take the following format: Label, Opcode, Operand ; Comment. There are numerous source files already on the disk which you can load and examine.

Assembling

To start assembly you type ASM in immediate mode. On the first pass the assembler will create the object code, and then a symbol is produced in numeric and alphabetic order. You can also assemble files directly to disk. Twelve addressing modes are available along with a special forced non-zero page addessing mode. Merlin also recognises over 50 pseudo opcodes which allow you to do things like define single and double byte values or define text strings. I was most impressed with the variety of operations which are simplified using these opcodes. Programs can be assembled to run at any address. There is also an OOPS facility which will undo any command.

Sourcerer

There are two versions of this disassembler on the disk. The disk based version is capable of disassembling object files up to 32k in length while the other version can only handle about 6k. Sourceror is loaded from the main menu and has it's own options menu. One feature of the Sourceror program is the automatic assignment of labels to all recognisable addresses. This file of labels is stored on the system disk and is accessed during disassembly. There is also a program on disk which allows you to edit the label names.

Macros

A library of macro definitions is stored on the system disk. You can load and inspect this library and also create libraries of your own. You can paste any

macro into your own programs with the USE command. There are eight special predefined variables which can be used in any macro call. Macros can be nested to a depth of 15 and the conditionals DO, IF, ELSE and FIN may be used within a macro. Once assembled each occurrence of a macro retains it's starting line number for each line of that macro definition. However you will see that the code has been inserted because the absolute address in the first column of the listing will be correct.

Linker

The linker is a program which can assemble large programs in one operation. You can also develop libraries of subroutines and link them to any Merlin program, or re-assemble programs to run at any address. This has to be a useful feature in the final development of large programs.

Utilities

There are quite a number of utility programs on the disk. PRINTFILER allows you to save an assembled listing as a sequential file, including the object code portion of a disassembled listing. This would be useful for sending listings to someone who wants to work with the complete disassembly without having to assemble the program. I found these text files loaded into Superscript without any problems. KEYDEFS allows you to define the function keys and ALTKEYS allows allows you to produce a keyboard macro using the Alt key with another key. There are some 30 definitions in the program which have been assigned assembly instructions which are user definable. HIRES and SWISH are demonstrations of graphic routines on the 40 column screen and the routines provided are said to be four times faster than Commodores own built in routines. ZAP is a useful program which contains some useful disk access routines and there is also a copy program. There are many other programs but it would take forever to describe the functions of each.

Conclusions

If you plan to write machine code programs on the 128 and you are considering buying a commercial package then Merlin comes highly recomended. There is also a 64 version available now and I have no doubt that the quality of the product is just as high. It may take me some time just to wade through all the programs on the disk, never mind actually developing programs. Experienced machine code programmers should find no difficulties in

getting started with this software package. I strongly recommend that any beginner should seek out a good machine code tutorial to help them get started. If any other member has purchased this product I would be delighted to hear from them.

MAIL MERGE & DATABASES

By Tony Wright.

I have recently been assisting a friend of mine, who lives in mainland Spain, to come to terms with BASIC on the Plus 4 and the workings of Script Plus. I also copied the 'PRO-FILE' program to him.

Whilst staying with him over Christmas I found that he had adapted 'PRO-FILE' to his own liking and had, amongst other things, inserted a subroutine into the program to create 'fill files' to use with the Mail merge facility when in Script Plus. Quite an achievement for a beginner!

However, his enthusiasm was somewhat dampened when he viewed his 'fill file' on Script Plus as it had, like Easy Script, Superscript and many other W.P.s, converted the upper case database characters to lower case. Being the eternal optimist he asked for my help and said would it be possible to create a 'fill file', using programming within the file subroutine to create a 'fill file' with upper and lower cases in appropriate places. Reluctantly, because my programming is not the best in the world, I agreed to try and after much agony came up with the following subroutine. I have shown the whole of the subroutine as it has been developed for the revised version of PRO-FILE so the line numbers do not match anything in the original program and the variables used are those used in PRO-FILE, i.e. N is the number of records and D$(J,K) is the string variable containing the data from each record, the variable J denoting the field and the variable K the number of the record.

I have no doubt this has probably appeared in some magazine/article at some time or other but, in case it has not, there may be someone out there who has a capitals only database (there are a lot about) and a need for an upper and lower case 'fill file'.

```
11300 rem ********************************
11310 rem **        fillfile            **
11320 rem ********************************
11330 print :print :print tab(4) "please wait...updating fillfile!!!"
11340 open 3,8,3,"@0:fillfile,s,w"
```



```
11350 for k = 1 to n :for j = 1 to 8 :b$(j,k) = d$(j,k)
11360 if j = 7 then gosub 11500 :goto 11450
11370 f(j) = len(b$(j,k)) :if left$(b$(j,k),1) < chr$(65) then 11400
11380 t$ = chr$( asc( left$( b$(j,k),1)) + 128)
11390 b$(j,k) = t$ + mid$(b$(j,k),2,f(j)-1)
11400 for m = 2 to f(j)
11410 if mid$(b$(j,k),m,1) =" " then 11420 :else goto 11440
11420 if mid$(b$(j,k),m+1,1) < chr$(65) then 11440
11430 t$=chr$(asc(mid$(b$(j,k),m+1,1))+128):mid$(b$(j,k),m + 1,1)=t$
11440 next m
11450 next j
11460 print#3,b$(1,k):print#3,b$(2,k):print#3,b$(4,k):print#3,b$(5,k)
11470 print#3,b$(6,k):print#3,b$(7,k):print#3,b$(8,k):print#3,b$(3,k)
11480 next k
11490 close 3 :return
11500 f(j) = len(b$(j,k))
11510 for m = 1 to f(j)
11520 if mid$(b$(j,k),m,1) < chr$(65) then 11540
11530 t$ = chr$( asc( mid$(b$(j,k),m,1))+128) :mid$(b$(j,k),m,1) = t$
11540 next m :return
```

Not everyone will have PRO-FILE, of course, but it should still be possible to to use the main bones of the subroutine to change files created by other uppercase only databases like PRACTIFILE etc.. To that end I will describe those lines in the program which may require some explanation. Before doing this I will list the fields used by the file:-

Field 1	-	Title i.e. Mr Mrs etc.
Field 2	-	Surname
Field 3	-	Christian name
Field 4	-	Address 1
Field 5	-	Address 2
Field 6	-	Address 3
Field 7	-	Postcode
Field 8	-	Country (for someone in Spain - essential)

Line 11350 creates a new string variable B$ to avoid altering the existing data in the variable D$.
Line 11360 postcodes need a different approach so action is sent to 11500
Line 11370/80/90 as the first character of the data in each field requires to be

1571 DISK DRIVE BUG

As previously mentioned in this Newsletter the CBM 1571 double sided disk drive appears to overwrite existing files in certain instances when the disk is more than half full. This would seem to imply it is only reliable when less than 664 blocks out of the 1328 possible blocks are used, effectively rendering it usable only as a single sided drive.

ICPUG, along with various software houses, is in possession of C/128 and 1571 ROM Bug Lists dated 23 September 1986 prepared by Fred Bowen, Senior Systems Engineer at Commodore in the US who originated the C128 concept and developed its architecture and operating system. ICPUG also have a set of the version 3 ROMs on EPROMs developed by CBM in the US which were designed to correct these bugs (but which appear to lead to other problems when used directly with existing 1571 data disks). One of the fourteen items on the 1571 Bug List which is also known as "Release Notes 1571 ROM upgrade to ROM 310654-03" states, "With multiple files open and sectors being allococated (sic) on both sides the BAM swapper mechanism would trash BAM side one. This has been remedied (1571)." As most readers will know the BAM is the Block Availability Map and is the index to all the information stored on a disk. Corruption of or trashing the BAM makes the disk unusable.

ICPUG wrote to CBM (UK) on 24 October 1986 about these problems and by letter of 28 October 1986 CBM (UK) promised a reply as soon as the Technical Manager, Michael Hambly, could discuss the "matter with Mr. Chris Kaday and the Marketing Department within the next 7 days". In their letter ICPUG made an informal proposal to help CBM (UK) distribute new 1571 and 128 ROMS. Unfortunately, no reply was received from CBM (UK).

Meanwhile one ICPUG member wrote numerous letters to CBM (UK) threatening legal action over this 1571 problem. CBM (UK) finally responded to this member's third letter on 29 January 1987, a portion of which reply reads, "Thank you for your recent letter concerning the 1571 disk drive. From your letter it appears that you have been given incorrect information. Commodore has made no statement regarding any problem with the 1571 disk drive. Our products undergo a continuous development process and if as a result of this, any action is deemed appropriate, it will be made public through trade journals, your local dealer, or user groups. Thank you for your support of Commodore."

After receiving a copy of this member's letter from CBM (UK) ICPUG contacted two local trading standards departments. One department in the London area stated that the appropriate office was the Berkshire one as CBM (UK) is located there. However, the Berkshire Trading Standards Department stated that, while in their opinion they could take action if someone advertised the sale of a quart of something while furnishing only a pint, a double sided drive which works only as a single sided one would be outside their purview and any complaints about them should be pursued as a civil action by the parties concerned.

(please turn over)

ICPUG is appalled at this state of affairs. If, what Berkshire Trading Standards Department says is true, then the Trading Standards Acts would appear to be rather ineffective and all redress by purchasers of faulty products of this type must ultimately be through the civil court system.

In view of the above, and after taking legal advice, ICPUG should like to advise its members that if, like the general public, they find products unsuitable for the purpose for which they were sold, may wish to consider as one possible option, legal action against the vendor of the goods in their local small claims court. A local consumer advice bureau should be able to assist with these matters.

ICPUG is continuing to explore ways of obtaining upgrade replacement ROMs for 1571 disk drives as well as ones for the C/128. Along these lines unconfirmed information has been received by ICPUG from the US and Australia which indicates that the version 3 ROMs have been abandoned and newer ones are under development. On the other hand, allegedly some or all of the CBM employees in the United States who were most knowledgeable with these ROMs and their development have been made redundant. We must stress, however, that this information has not been confirmed.

We would appreciate if members would keep ICPUG informed of any correspondence they may have on this subject from CBM, local dealers, trading standards departments, the Advertising Standards Authority, local MPs, and the like. All such correspondence should be sent to the Chairman, Jim Kennedy. However, with all the work that this involves it will not be possible for him to reply to each and every letter received, only to build the necessary file for possible future actions on behalf of all members.

We shall keep everyone posted on developments as they become known through the Newsletter.

Copies of correspondence to:

Lt. Col. James M. Kennedy
57 Gunnersbury Avenue
Ealing
London W5 4LP

We apologise for having to place this notice in the Newsletter as a separate sheet, otherwise it would have been delayed until the March/April issue. However, we are all very concerned with these matters and felt all members should be aware of them as soon as practible.

```
print#8                    [RETURN]
close 8                    [RETURN]
```

Your program will now exist as a SEQ file on disk. Send the disk to me, together with a formatted Amiga disk, return postage and a return address label. When you get your disks back, your program will be on the Amiga disk, ready for you to edit into a form suitable for AmigaBasic.

To transfer an IBM basic program, save it to disk as follows.

```
save filename.txt,a        [RETURN]
```

The ',a' ensures the file is saved as straight ASCII, so it can be transferred and then edited for AmigaBasic. So, to recap, any member may take advantage of this service by sending me

1. Disk(s) from source machine, clearly labelled with format used.
2. Disk(s) for target machine, labelled with desired format.
3. A note with a clear indication of what needs doing to what.
4. Your name, address and current ICPUG membership number.
5. Return label and postage.

I am pleased to provide this service for members, as it helps me put something back into ICPUG. If there is sufficient interest, I will write an article for the newsletter explaining the methods I use for transfer. Let me know if you would like to see this.

Send your disks/comments to Brian Fowler (address inside front cover)

THE 1988 FULL NEWSLETTER INDEX

Due to unforseen technical difficulties, we are unable to bring you the full 1988 newsletter index in this issue. Please accept our apologies; we will try to ensure that it appears in the March/April edition.

AMIGA SEX CHANGES

by our resident sexologist, Dr David Annal

Both the parallel port and the serial port on the A500 and A2000 are different to those on the A1000. They are different not only in gender but also in pinouts. I describe below how to connect an A1000 Digi-View module to an A500. Printer leads and some modem leads may have to be changed in a similar way. If there is any interest shown in the modifications necessary I will deal with them at a later date but meanwhile this is an example of what we are up against.

The original Digi-View module, discussed in the May/June 88 issue, is female and was designed to mate with the male parallel port of the Amiga 1000 and produce little pixel masterpieces. Now if you bought such a 'mummy' Digi-View and took it round to your friend with an A500, or a superior with an A2000, you would be disappointed to find that it won't plug in! Their machines need a 'daddy' Digi-View, with pins, because their parallel ports are mummies and 2 mummies do not make a tight fit!

"OK," I hear the most sexually aware of you crying, "In this day and age it is easy to change sex. All we need is a gender bender of the two male kind." (I hope Mary W does not read this!). "Digi-View female plugs into one end and the other end, now male, will easily mate with the new machine." It will... but it won't interact! How perverse! There is a sexual deviation!

What can we do? We can shell out more than £18 for a purpose built homosexual converter or those of you who can wield a soldering iron and have 2 D-type 25 pin male connectors handy should wire them as follows-

Digi-View End		500/2000 End
pins 1 - 13	wire individually to	pins 1 - 13
pins 14 - 22	join together and connect to	pins 17 - 25 also joined
pin 23	wire to	pin 14
pin 24	leave both unconnected	pin 15
pin 25	wire to	pin 16

(Those of you unfamiliar with the connectors, don t worry, the pins are marked with their numbers) Don't forget to label which end of your lead is which as they are both male and once you've seen one, you've seen them all!

READERS WRITE...

Edited by Brian Fowler (Address inside front cover)

K.J.R. MacLennan writes from Balchraggan, 2 Craigrory, N. Kessock, Inverness, about problems with his Star LC10C colour printer and Superbase / script...

The lesser of these problems involves Superscript in that embedded control characters to change pitch, type style and colour interfere with tabulation settings. To some degree this can be circumvented by typing such control characters on a line on their own.

The problem with Superbase is much more serious. The simple printing of the execution of a program (or even the listing of the program itself) will hang up with the screen message I/O error #5. The system is then completely locked up and I have discovered no exit other than turning off the computer and reloading. But I have discovered that I can get a printout if I have the MPS801 simultaneously in action in series with the LC10C. Extra @ symbols appear on the MPS801 print however.

I have been in contact with both Star and Precision. The latter have been given a disk with the bug on it and confirm that it exists but offer no remedy. They say that the problem resides in the commodore emulation of the LC10C. Star are baffled and say they have had no other reports of this problem but are contacting their German connection to see if there is any further information.

I am wondering whether any other members have experienced such problems and being more expert than myself have discovered a remedy ?

Allan Morris of 4 Millbrook Road, Newall Green, Manchester, M23 8XH writes about a problem he's having with the new Workbench 1.3.

I've been trying out the new Aux-handler and AUX: device contained on the latest 1.3 (34.7) Workbench and 1.3 (34.5) Kickstart, but have found the following problem.

When AUX: is mounted and a NewCli is created on it, all available fast memory is fragmented, although only about 20K has actually been used. This leaves a situation where you can use a remote device but only for very small programs. Is it a bug? Any ideas?

This is what I did.

Mount AUX:

NewCli AUX:

Avail

This is what I get.

Type	Available	In-Use	Maximum	Largest
Chip	251536	264328	515864	202760
Fast	2037656	59464	2097120	80
Total	2289192	323792	2612984	202760

Gary Haslam, Tech Troop, One Squadron, 7th Signal Regiment, B.F.P.O. 15 writes...

I'm writing this letter as a plea for help on the following points :-

[01] Are there any ICPUG members living in West Germany who would be interested in forming a local or regional user group based around the 4900 Herford area? I already have room and facilities for about 20 people and machines,altough this could be expanded if necessary. All I need are the people to fill it !! I can teach / help with the following:-

Most aspects of the C64 especially 6502 and Basic.

General introduction and Basic on the Amiga.

[02] I've just started learning 68000 and C on the Amiga. If anyone's got any tips, recommendations or help on these points I'd love to hear from them.

[03] I would like to buy an Amiga 2000 keyboard housing and connecting cable. The idea is to remove the keyboard from my A500, fit it into the 2000 housing and enjoy the flexibility that 2/1000 owners already have. It is possible to buy them here in Germany but at an approximate cost of £50. That's a lot of money for a bit of plastic and some cable. If anyone has the name address of a supplier please let me know.

[04] Has anyone any experience with ordering Soft / Hardware from the U.S.A. I have an Access and Visa card so payment should present no real problems (Apart from convincing the bank manager to lend me the money!). What does worry me is being stung for a postal charge that is in excess of the money I've saved by ordering from the U.S.A.

[05] I'm growing rather fond of the idea of buying a modem. The thought of 'chatting' with people of a similar interest is very appealing.Unfortunately I haven't got a clue where to start. I'm prepared to pay up to £200 for Software and Modem. The package has to work with a 1MB Amiga 500. Would anyone with experience in this field please get in touch with me. I would hate to spend my money on something unsuitable, purely through lack of knowledge.

I will reply to all letters, if only to thank people for THEIR time and effort. I'm waiting to hear from YOU!!!

DISCOUNT CORNER

by John Bickerstaff

A Happy New Year to you all. In this issue most of the current discount facilities are listed. Changes and new facilities will be detailed in later issues.

General Information

Most discount offers are available only to UK members. Overseas members should write to me first before attempting to place any orders.

Information on discounts appears in this regular spot - however, it is not possible to provide lists of discounted products. Please remember it is often worth a 'phone call to me before you buy. Call after 8.30 pm and before midnight (or leave a message), thank you.

Adamsoft - contact David Tomkinson, 18 Norwich Ave, Rochdale, Lancs OL11 5J2, allow members discounts of up to 20% on ABACUS and 10% on many other products. Call David on 0706-524304.

Amiga Centre of Scotland - contact Martin Lowe, 4 Hart Street Lane, Edinburgh, EH1 3RN, allow members a minimum of 10% on items they import and distribute. Call Martin on 031-557 4242 for details.

Ariadne Software Ltd - 273 Kensal Road, London W10, 'phone 01-960 0203 will supply their Kickstart Guide to the Amiga to members at the special price of £9.50 plus £1.00 towards postage and packing. Most Amiga hardware is available from them at a discount of 10% including the famous GENLOCK.

Brain Boxes - Unit 3G, Wavertree Technology Park, Liverpool L7 9PF ('phone 051-220 2500) allow 15% discount to members on all their products. Their IEEE interface is switchable and suitable for the C128 and C64 @ RRP of £69.95, RS 232 interface for C64 or C128 @ RRP of £49.95 and user port to centronics printer cable @ RRP of £19.95. Their standard PSI box is £299.95 and their IEEE half slot PC card is £249.95. Please add VAT to all prices after deducting 15% discount.

Bytes & Pieces - 37 Cecil Street, Lytham, Lancs, FY8 5NN offers special prices to members. Look for their advertisements in each newsletter. For further information call Chris Wright on 0253-734330.

Cavendish Commodore Centre - 66 London Road, Leicester, LE2 0QD 'phone 0533-550993, offer members discounts on any of the many items they stock. They hold a very large number of Commodore and Commodore related items. The AmigaDOS V1.3 enhancer pack is now available at the members price of £12.99. Call and ask for Keith, Yuri or Malcolm.

Clements Disk Supplies - 391 Caterhatch Lane, Forty Hill, Enfield, Middx, EN1 4AN offer Verbatim Data Life disks at special prices to members. 3.5" double sided disks are sold at £14.27 for ten inclusive of P & P & VAT.

Compunet Teleservices Limited - Sheraton Business Centre, Wadsworth Road, Perivale, Middlesex, UB6 7JB 'phone 01-997 2591, offer special communications packs including a Modem, software and a limited period subscription. Call them for more details.

Consup Limited - Lyntad House, Finck Street, Off Upper Marsh, London SE1 7EN 'phone 01-928 3252, offer a pack of 5 Disk Mailers (5.25 inch) at £4.00 inclusive of VAT, postage and packing. There is a special offer of the Epson GQ 3500 laser printer at £1199.00 plus VAT including a HP Laserjet plus emulation card and two FONT cartridges (fonts supplied at random) with 1 year on site warranty. Call Tad for more details.

DB Electronic Services - 205 Meadgate Avenue, Great Baddow, Chelmsford, Essex CM2 7NJ 'phone 0245-260874, offer a repair service to most Commodore equipments. Contact Dave Barber for more information.

Digipro Ltd - Enterprise House, Howards Grove, Southampton SO1 5PR 'phone 0703-703030 are Commodore specialists. Your are welcome to call at their shop at any time. Your contact is Ian Bennett.

Tony Firshman Services - 12 Bouverie Place, London W2 1RB 'phone 01-724 9053, offer members mains cleaners at £17.10 for the 3-way adaptor and £22.80 for the 4-way trailing socket.

Derek Hoare - 29 Shackleton Road, Tilgate, Crawley, Sussex RH10 5DF 'phone 0293-542823, offers members a repairing or spares supply facility for many Commodore products.

ICPUG have a few copies of Multisoft for the C128, C64 and Plus/4 machines. You need a disk drive - 1541,1570,1571 or 1551 drives are all

suitable. Multisoft is an Assembler and Program Development System which is reviewed in this issue. The program is offered for a donation to the club funds of £5.00 inclusive of postage and packing. Please contact the Discount Officer for details.

Lan Computer Systems Limited - 1063 High Road, Chadwell Heath, Romford, Essex RM6 4AU 'phone 01-597 8851, offer members special prices on Amiga and PC Commodore products. Members should contact Tony or Mark for information.

Megaland - 16A City Commerce Centre, Marsh Lane, Southampton SO1 1EW 'phone 0703-330544, have advised two special Star printer prices each with moulded Commodore serial interface. The LC10 is £159.00 and the LC10 Colour is £199.00 both prices are inclusive of VAT. Call Mike Caine for more details.

Microtext offer their teletext adaptors to members at ten percent less than recommended prices. Contact Terry Cassell for details on 0705-595694 or write to 7 Birdlip Place, Horndean, Hants PO8 9PW.

Precision Software Ltd allow members on direct application a discount of 25% on their own software. Discounts on third party products is 15%. Please state your membership number when calling them on 01-330 7166 or writing to them at 6 Park Terrace, Worcester Park, Surrey KT4 7JZ - they accept some credit cards.

The Queens Armes Hotel - Charmouth, Dorset, have agreed to continue their special offer to ICPUG members of 10% discount from their standard daily rates for the 1989 season. For details call Peter Miles on 0297-60339. This hotel is Ashley Courtney and ICPUG recommended.

Transactor is published in the UK by Transactor (UK) Limited - Unit 2, Langdale Grove, Bingham, Notts NG13 8SR 'phone 0949-39380. Contact Dave Beatty to take out a subscription. The price is £3.50 per issue and there are six issues each year.

Vidanimo Computer Graphics - Damery House, Spring Hill, Nailsworth, Glos GL6 0LU 'phone 0666-54210, have a special bumper A500 pack available to members for only £449.95. Call them for more details.

Viza Software Limited - now at 4 Queens Terrace, Exeter, Devon EX4 4HR 'phone 0392-421007, offer to members their Vizawrite at £25.97 (£32.47 on cartridge), Vizastar XL4 £32.47 or XL8 £38.97 - all for the C64. Vizawrite Classic and Vizastar are available for the C128 at £38.97 and £51.97 respectively. Vizawrite for the PC is withdrawn, to be replaced later this year. Viza's DeskTop for the Amiga version 2.0 is £65.00. All these are net prices to members. Please send your orders to me enclosing your cheque made out to Viza Software Limited (endorsed on the rear with your membership number and address) and enclose a 19P stamp.

Discount pages - COMPUNET GOTO 326989 MICRONET *81021324#

ERRATA VOLUME 10 NUMBER 6

Due to some technical difficulties encountered by the previous incumbents of the green-eyeshade-with-fluffy-dice, some of the spaces between words became unglued and fell out of the Newsletter. Out of consideration to our members, the ICPUG committee has authorised, at great expense, the publication of a series of extra spaces to insert in your copies of said issue. Scissors and glue are, regretfully, not provided.

Due to another lapse of security, a number of extra pages were found to have hidden in a number of copies. We would ask those people who had these extra pages to show consideration and send them to the members whose Newsletters were sadly lacking.

For convenience, the extra spaces have been attached to the page below. If these are not sufficient, please let us know, and more will be included in the next issue.

FOR SALE AND WANTED

Editors note: Copy for small advertisements (no more than six lines please) should be sent to the Chairman, John Bickerstaff, by the first Saturday of the first month on the cover of the required issue.

WANTED

WANTED: A good home for a green screen monitor suitable for a C64. A suitable worthy cause is sought such as a school or an ICPUG Regional Group. No charge but new owner must collect monitor. Contact Hugh de Glanville on 093247629.

WANTED: colour monitor either RGB or composite, either working or not working. Suitable for C128 etc. Apply to JOHN WALKER, 14 LEAMSIDE, LEAM LANE ESTATE, GATESHEAD, TYNE AND WEAR, NE10 8NT. TEL. 091-4690157.

WANTED: Manual for Adamsoft's VISICALC, preferably for use with PET. Contact John Lancaster, Swansea (0792) 298251.

WANTED: 1900 Monitor for C128 (c. or bw); CP/M Plus users guide. Tel G. C. Davies (0493) 663195 Great Yarmouth.

FOR SALE

FOR SALE: Unused Rubycomm software which includes Ruby-View and Ruby-Term suitable for the Amiga 500. Offers please £30.00 ONO. Call Mr. B. Belton on 0273-492885 evenings.

FOR SALE: C128, 1541 & 1571 disk drives, Phillips Green Screen Monitor, Datasette, 1525 Printer.Xtec Super Graphics Interface. About 20 serious programs including Fontmaster, Geos, Print Shop. Simon's Basic. At least 20 Games including Solo Flight, Mission Impossible, Colossus Chess. £495 the lot. Phone Nigel Corry on Medway (0634) 407693.

FOR SALE: Star SG 10-c Printer in first class order, original packing, leads, manual etc. NLQ tractor and cut feed £120.00. Commodore MPS 802 printer leads manual tractor and cut sheet in first class order £70 Telephone Mr. J.Cohen 0702 73805.

FOR SALE: 12" Green Screen monitor no case, working with circuit diagrams etc. needs 12 volt power supply @ 1.5 amps. Free to anyone who can collect.

Apply to JOHN WALKER, 14 LEAMSIDE, LEAM LANE ESTATE, GATESHEAD, TYNE AND WEAR, NE10 8NT. TEL. 091-4690157.

FOR SALE: 8032 computer 8050 disk drive + parallel interface £230. C64 £80, C128 £120, D/D 1570 £80, 1541 £70, Interpod £50, 14" green monitor £40, MPS 801 printer £80, 3-tier steel framed computer stand £50. Ken Durkin 091 373 4045 or offers for all.

FOR SALE: C64 + Star SG-10C printer, mint, boxed + Easy Script (disk) £210; Star NL-10C printer, brand new, boxed, spare ribbon £160; NEOS mouse & Cheese £25; SUNCOM Animation Station Graphpad with software, hardly used £40; Mini Office II £18; Artist 64 powerful graphics and design package (unwanted gift) £25; Music Master 64, never used £20; Buyer to collect. Contact Felix Flatter, 251 Edgwarebury Lane, Edgeware HA8 8QL Tel day01-405 0348; or eves after 8:30 pm 01-958 7127.

FOR SALE: C128, 1571 and 1581 disc drives, C2N Datasette, CBM modem plus 30+ disc/tape and cartridge software titles. £450 ono. Buyer to collect. Will not split. Dedicated Commodore printer £80. Contact Andrew Thomson, (0494) 711223 (Hazlemere, High Wycombe)

FOR SALE: CBM 4016N perfect condition, all manuals, phone Stephen on YORK 622281.

FOR SALE: TRS80 (Seikosha) 9 pin dot matrix printer. Centronics & serial I/P, Tractor/plain paper, 6 character fonts, 2 graphic levels, form feed etc. With box and manual, in exceedingly good condition. £85 with Amiga cable. A. Miller, 8 Middlemist Grove, Great Barr, Birmingham B43 5EJ. 021-358 1843.

FOR SALE: Misc Amiga utilities & games - Superbase Personal, Photon Paint, Annals of Rome, Kings Quest III, Championship Golf, Quizam!, Starglider, Mindshadow, Uninvited, Mean 18 Golf & Zork 2. I am also able to offer colour printouts of artwork on my Xerox 4020. Contact Pete Wright, 45 Mundon Road, MALDON, Essex CM9 7JT or telephone (0621) 56207

FOR SALE: A1000 Amiga just serviced and A1 condition £325 ono. Contact Chris Wright on (0253) 734330 or (0860) 254344.

FOR SALE: CBM 1701 Colour Monitor suitable C64, (128 in 40 col mode) £50 CBM 80 Column Mono Monitor suitable C128 - 80 col mode only £35 MW-302 Parallel Printer I/f £20 Super Spooler Parallel i/f (suitable Epson FX/RX/MX printers only - fits internally) - emulates CBM graphics £25 Vic-Tree Toolkit Cartridge + Parallel Cable £15 Tandy/Racal V21/V23 Modem - Autodial/Answer (NOT Hayes) £35 Brainbox RS-232 I/f £20 - Modem & Interface together £50. Quill Adv Writer (£5), Pitman Typing Tutor (£5) Becker Basic (GEOS) (£15)C128 (Native): Matrix - 64 mode utilities (£15) Swiftcalc Spreadsheet (£15)C128 (CP/M): Hisoft Modula-2 (£20) Hisoft Devpac80 Assembler V2 (£20) p&p - add 10% Mike Rose 01-368 6645

FOR SALE: SUPERBASE/Superscript 128 £15 each, Printshop/printshop companion £20 the pair, VIP Terminal £20, FS II £10, Swift spreadsheet £8, Matrix £10, 128 Helper £8, Cannon £8, Autocalc £6, CBM Assembler £6, Fast hack'em £10, Disk librarian £10, Super disk doc £8. CBM 64 prog ref guide, Anatomy of 1541, Programming the pet/cbm, Programming the cbm 64, pet/cbm personal computer guide £5 each. Many small interfaces/cables/eprom programmer / relay boards etc to clear at give away prices make me an offer! Phil Hicks 0742 682275 eves.

FOR SALE: PET 8032-SK (a.k.a. Porsche model) computer upgraded to 8096 with 64K extra memory, 8250 disk drive (regular not low profile model) and connecting cable £400.00. Can arrange for buyer to collect from Portsmouth during weekdays. Ring Jim Kennedy (0983) 292000 days, (0983) 615982 evenings.

FOR SALE: 1551 disk drive (for Plus/4 or C-16) with demo disk and manual. £60. Contact Ian Paterson, Haddington, East Lothian. Tel 062-082 4797.

FOR SALE: CBM 128, 1541 disk drive, MPS1000 printer, 1901 colour monitor, Computer desk, Spreadsheet, Word processing and database software for both CBM 64 and 128. £575 ono the lot, or will reluctantly split. Tel. Vernon George, Hoddeston (0992) 464570 (evenings or weekends) or 01-205 6237 (office).

FOR SALE: C128, 2 joysticks and keyboard overlay £120. 1571 disk drive with 2 lockable floppy disk cases and 80 disks £135. MPS80? dot matrix printer £60. 10 Meg hard disk drive (for C64 or C128) with IEEE cartridge and leads £200. 13 manuals and approx 100 magazines £50. Expert cartridge and software £15. C128 to TV in 80 columns mode interface £10. Neos mouse £10. Will split, or £450 for the lot. Don Rossie, 7 Moor Park, Cowplain, Hants. PO7 8NP. Tel (0705) 263064

ICPUG SOFTWARE LIBRARIES

Organiser: Joe Griffin, Clovelly, Lynwick St., Rudgwick, Horsham, W Sussex RH12 3DJ

Please remember that the Libraries are operated on an entirely voluntary basis and unlike many of the American User Groups, ICPUG DOES NOT CHARGE A COPYING FEE.

The Libraries contain PUBLIC DOMAIN programs from a wide range of sources, including our own members and other user groups. WE DO NOT SUPPORT SOFTWARE PIRACY.

Members may obtain ALL the library material. In order to retain a measure of control over the work-load imposed on the Copiers, however, we do restrict the amount of material which may be obtained from any one request.

Disk Users may obtain up to two disk copies at a time (Amiga: five).
Tape Users may obtain up to four programs, from any one disk.
(Please use a C-60 or C-90 tape; a C-15 or C-30 may be too short.)

For ALL libraries (except Vic) a catalogue disk is available, containing a list of the library contents. PRINTED CATALOGUES ARE NOT AVAILABLE.

To obtain copies of catalogue or library disks, please send :
A statement of what you want
Your membership number. (Requests without may be returned uncopied)
Disks (STATING format [type of drive] required) or Tape (C-60 or C-90)
We will NOT use a disk as a 'flippy' as it can damage the disk drive.
Pre-addressed re-usable packaging suitable for return
There have been occasions when disks have arrived bent in half!
Please ensure that the packing is adequate.
Return postage - SEND STAMPS.
Overseas members should send International Reply Coupons
(for Surface Mail allow at least one and a half IRC's per disk sent).

PET Joe Griffin (see above)

VIC Tape & 1540/1541 Copies from David Miller (See C-64 library)
8050/8250 format only from Joe Griffin (see above)

Software Libraries (cont.)

COMAL Brian Grainger, 73 Minehead Way, Stevenage, Herts SG1 2HZ

1520 Plotter - W G C Austin, School of Geography, Faculty of Humanities, Newcastle Polytechnic, Lipman Building, Sandyford Road, Newcastle upon Tyne NE1 8ST

1520 (Tape): John Bentley, 38 Conway Road, Taplow, Maidenhead, SL6 0LD

PC Organiser: Tim Arnot, 70 Westway, Botley, Oxfordshire
Catalogue from John Robinson, 1 St James Court, Cliff Gardens, Scunthorpe, S. Humberside DN15 7PR Please always send your requests to the copier listed below who deals with the Catalogue Category of material you want.

A-D Henry Velleman, 52 Ventnor Drive, Totteridge, London N20 8BS
E-O Peter Crowder, 27 Crawford Drive, Liverpool L15 8AE
P-Z David Harrow, 28 Phoenix Drive, Wateringbury, Maidstone, ME18 5DR

Plus/4 & C-16 - Organiser: Richard Hunt 45 Cumberland Rd, Bromley, BR2 0PL
Please send your requests to the copier listed below who deals with the first letter of your surname.

A-M Richard Hunt (see above)
N-Z Joe Shirras, High View, 69 Ighten Road, Burnley, Lancs. BB12 0HP

C-64 Organiser: David Miller, 38 Exeter Gardens, Ilford, Essex IG1 3LB
Please send your requests to the copier listed below who deals with the first letter of your surname.

A-B Joe Quintin, 7 Cotterhall Ct, Clover Hill Bowthorpe, Norwich NR5 9AZ
C-F R Burns, 48 Grasmere Road, Royton, Oldham, Lancs OL2 6SR
G-K Norman Wright, 73 Queens Road, Littlestone, New Romney, TN28 8LS
L-O James Mason, 35 Woodburn Drive, Dalkeith, Midlothian EH22 2AZ
P-S M J Mann, 502 Dereham Road, Norwich, Norfolf NR5 8TU
T-Z Peter Crowder - (see PC above)
Overseas & 8050/8250 Joe Griffin - (see above)

128 Organiser: Chris Wright, 37 Cecil St., Lytham, Lancs. FY8 5NN

Software Libraries (cont.)

Please send your requests to the copier listed below who deals with the first letter of your surname.

A-C Bill Gardner, 156 Henwood Rd, Compton, Wolverhampton WV6 8PA
D-J Tom Nuttal, 43 Renshaw Drive, Bury, Lancs BL6 7NJ
K-R Robert Dally, 6 Derwent Crescent, Clitheroe Lancs BB7 2PW
S-Z Dave Tew, 4 Acombe Crescent, Hambrook Pk, Charlton Kings, Cheltenham, Glos GL52 6YH

Overseas (All) Derek Clifford, 36 Hanover Avenue, Feltham, TW13 4JW
1581 requests to Bob Dally (see above)
128 Bulletin Board on 0902-745337 (24 hrs) [Also for PC users]

Amiga - Organiser: Peter Miles, The Queens Armes Hotel, Charmouth, Dorset
Write to him with/about your programs.Disk copies should NOT be requested from the Organiser.

Amiga Disk Copiers: [Not more than 5 disks at one time] Specific ICPUG Disks and the catalogue of Read-Me files (ie contents) for these. ALSO for the New Amiga User Set of 5 disks. Please send your request to the copier listed below who deals with the first letter of your surname.

A-D David Annal, 142 Windermere Road, Norbury, London SW16 5HE
E-K Peter Reeve, 2 Court Road, Tunbridge Wells, Kent TN4 8ED
L-R David Flint, 24 Hawthorden Avenue, Uttoxeter, Staffs ST14 7NZ
S-Z Chris Wright (see 128 above)

Public Domain (Non-ICPUG)
- Amicus disks and the catalogue of Read-Me files (ie contents) for these may be obtained solely from:
Ray Burt-Frost, 169 Dale Valley Road, Hollybrook, Southampton SO1 6QX

- Fish disks and the two catalogue disks of Read-Me files (ie contents) for these. Please send your request to the copier listed below who deals with the first letter of your surname.

A-K Eddie Moore, 4 Gosling Close, Hatton, Warrington, Cheshire WA4 5PB
L-Z John Grove, The Cobnuts, Cobbs Close, Ightham, Sevenoaks Kent TN14 9DB